

2011

## Caring for Place: Negotiating World Heritage on Lord Howe Island

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Farrier, Lucy, Caring for Place: Negotiating World Heritage on Lord Howe Island, Bachelor of Science (Honours), School of Earth & Environmental Sciences, University of Wollongong, 2011.  
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## Caring for Place: Negotiating World Heritage on Lord Howe Island

### Abstract

Lord Howe Island, located 700 kilometres north east of Sydney, New South Wales, is part of the World Heritage listed Lord Howe Island Group. In 1982 the Lord Howe Island Group was listed under the World Heritage Convention for its outstanding 'natural' heritage values. Since the listing, the World Heritage Convention has revisited the concept of 'nature' as the sole criterion for the designation of World Heritage, by embracing the concept of 'cultural landscape'. However, this has no retrospective effect and therefore has not affected the listing of the Lord Howe Island Group. Consequently, despite a cultural heritage of over 180 years of European settlement, Lord Howe Island's 'cultural landscape' and 'intangible heritage' are not valued in the process of managing it as a World Heritage Site.

This thesis explores the consequences of environmental management processes arising from World Heritage listing which presently operate to marginalise, if not silence, Islander knowledge and how Islanders and other residents care for the Island. To do so, the project invited all Island residents, including those employed in 'environmental management' positions, to talk about *what* and *how* they care for the Island. The project required the development of a methodology that employed mixed-methods, and, crucially, was mindful of the concept of *islandness*, that is the cultural protocols of island places. Applying a form of narrative analysis, the results explore the differences and similarities between how 'Islanders' and other residents, on the one hand, and 'environmental managers' on the other, talk about nature, the Island, boundaries, plants, animals and World Heritage. Case studies illustrate how 'environmental managers' and other Island residents, particularly 'Islanders', draw on different knowledge-making practices to care for the Island and how this often results in disagreement over what should be protected, and what belongs and does not belong on the Island. This thesis suggests contemporary concepts of World Heritage, including 'cultural landscape' and 'intangible heritage', offer a mechanism whereby the process of environmental management of Lord Howe Island can engage with different knowledges of caring for the Island.

### Degree Type

Thesis

### Degree Name

Bachelor of Science (Honours)

### Department

School of Earth & Environmental Sciences

### Keywords

islanders, cultural, heritage, values

Faculty of Science

# **Caring for Place: Negotiating World Heritage on Lord Howe Island**



**Lucy Farrier**

**This is a Bachelor of Science, Land and Heritage Management Honours Thesis from the University of Wollongong submitted in part fulfilment for the degree of BSc LAHM (Hons).**

**October 2011**

The information in this thesis is entirely the result of investigations conducted by the author, unless otherwise acknowledged, and has not been submitted in part, or otherwise, for any other degree or qualification.

Signed: .....

12<sup>th</sup> October 2011

## ABSTRACT

Lord Howe Island, located 700 kilometres north east of Sydney, New South Wales, is part of the World Heritage listed Lord Howe Island Group. In 1982 the Lord Howe Island Group was listed under the World Heritage Convention for its outstanding 'natural' heritage values. Since the listing, the World Heritage Convention has revisited the concept of 'nature' as the sole criterion for the designation of World Heritage, by embracing the concept of 'cultural landscape'. However, this has no retrospective effect and therefore has not affected the listing of the Lord Howe Island Group. Consequently, despite a cultural heritage of over 180 years of European settlement, Lord Howe Island's 'cultural landscape' and 'intangible heritage' are not valued in the process of managing it as a World Heritage Site.

This thesis explores the consequences of environmental management processes arising from World Heritage listing which presently operate to marginalise, if not silence, Islander knowledge and how Islanders and other residents care for the Island. To do so, the project invited all Island residents, including those employed in 'environmental management' positions, to talk about *what* and *how* they care for the Island. The project required the development of a methodology that employed mixed-methods, and, crucially, was mindful of the concept of *islandness*, that is the cultural protocols of island places. Applying a form of narrative analysis, the results explore the differences and similarities between how 'Islanders' and other residents, on the one hand, and 'environmental managers' on the other, talk about nature, the Island, boundaries, plants, animals and World Heritage. Case studies illustrate how 'environmental managers' and other Island residents, particularly 'Islanders', draw on different knowledge-making practices to care for the Island and how this often results in disagreement over what should be protected, and what belongs and does not belong on the Island. This thesis suggests contemporary concepts of World Heritage, including 'cultural landscape' and 'intangible heritage', offer a mechanism whereby the process of environmental management of Lord Howe Island can engage with different knowledges of caring for the Island.

## **ACKNOWLEDGMENTS**

This research would not have been possible without the enthusiastic cooperation of the Lord Howe Island residents who participated in this project. Thank you for your time, trust and hospitality (including the endless cups of tea and Island delicacies!). I feel privileged to have heard your stories.

A special thank you to Robyn and Peter Curtin who first introduced me to the wonders of Lord Howe Island and encouraged me to take an interest in its environmental management and social history.

I would especially like to thank Daphne Nichols for welcoming me to the Island and making me feel at home during my stay there. I really enjoyed learning about the social history of the Island.

Thank you to the staff of the Lord Howe Island Board and the Marine Parks Authority for generously giving their time to participate in interviews and answer other questions relating to the management of the Island, as well as giving me access to documents.

Thank you to the Lord Howe Island Museum staff and volunteers, particularly Ian Hutton and Robyn Warner, for assisting me in my search for archival material and other written sources.

Michael Adams and Gordon Waite supervised this project. I will be forever grateful for their help, support and guidance throughout this challenging and sometimes overwhelming honours year. Thank you for the weekly conversations which both inspired me and kept me sane! I could not have hoped for a better pair of supervisors.

Finally, I would like to thank my family and friends for their ongoing enthusiasm and encouragement. I would particularly like to thank my parents David and Denise for their help and support and for always believing in me. And thank you to Matt for joining me on this adventure.

## **EXPLANATORY NOTE**

A better understanding of management policies of Lord Howe Island as a World Heritage designated site is both complex and challenging. This document is a BSc Honours undergraduate thesis, completed in approximately nine months. Within these limitations, it is not possible to engage with and examine all aspects of such complexities and challenges.

The research paradigm used in this project is qualitative (not quantitative). This project uses appropriate and rigorous qualitative research methods to ensure reliability. There is a very large body of literature supporting qualitative approaches for this kind of topic. As qualitative research, the outcomes are based on analysis of the data collected, organisation into emergent themes, and analysis of those themes. The quotations of interviewees elucidate those themes.

All residents on the Island were invited to participate, and many chose to do so. However, the residents interviewed do not represent the views of all residents. Accordingly, the discussion and interpretation in this thesis examines the views and experiences of those residents who chose to participate in the project, set within a broader examination of the implication of management arising from the changing definition of World Heritage.





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# Chapter One: Introduction



**People swimming and snorkelling at Ned's Beach**

## 1.1 Introduction

Lord Howe Island is located 700 kilometres north east of Sydney, New South Wales, Australia, in the Tasman Sea. The Island is the only one inhabited by people in the World Heritage listed Lord Howe Island Group. The Group was inscribed on the World Heritage list in 1982 based on its outstanding 'natural heritage values' that met two of the criteria of the Operational Guidelines for the implementation of the World Heritage Convention (see Table 1.1 and Figure 1.1). The World Heritage designation, made in the early years of the World Heritage Convention, embraces the notion of natural heritage as pristine, untouched wilderness framed by Western knowledge systems of science.

This chapter begins by outlining the research aims and their significance. The chapter then describes why Lord Howe Island was designated as World Heritage for its 'natural values'. Next, the chapter outlines the social research context under the sub-headings: demography, economy, cultural and policy. These



headings provide the necessary context in which to understanding how Island residents talk about the Island, environmental management and World Heritage.

## **1.2 Thesis Aims**

The aims of this thesis are threefold:

- To critically explore the nature, island and World Heritage talk of Lord Howe Island residents and environmental managers.
- To explore appropriate geographic methodological approaches to doing island research.
- To explore how rethinking the concept of World Heritage could be employed to revisit environmental management *processes* on Lord Howe Island.

## **1.3 Research Significance**

These aims are significant for three reasons. First, recent discussions concerning the tensions arising between global and local heritage values, reveal that acknowledging local heritage values is vital to the sustainable management of World Heritage properties. Moreover, Couch (R. Couch, pers. comm. 2011) emphasises the importance of re-examining older World Heritage listings to reflect upon the notion of World Heritage, which is continuously evolving. Second, there is limited research that investigates the implications of World Heritage designation on local communities and residents that live in World Heritage areas. Furthermore, it is apparent that Lord Howe Island residents are concerned about the implications of World Heritage designation on their everyday lives and Island management. Thirdly, there is an obvious gap in the research on Lord Howe Island concerning cultural heritage and human significance, in particular, local cultural heritage values.

In addition to these gaps in research, this project is of particular significance because it has the potential to contribute to the future management of Lord Howe Island. The Lord Howe Island Board has recently developed the Lord Howe Island Community Strategy (2010) and is in the process of releasing a

community-based heritage study hence, this project is extremely relevant to the Island at this time.

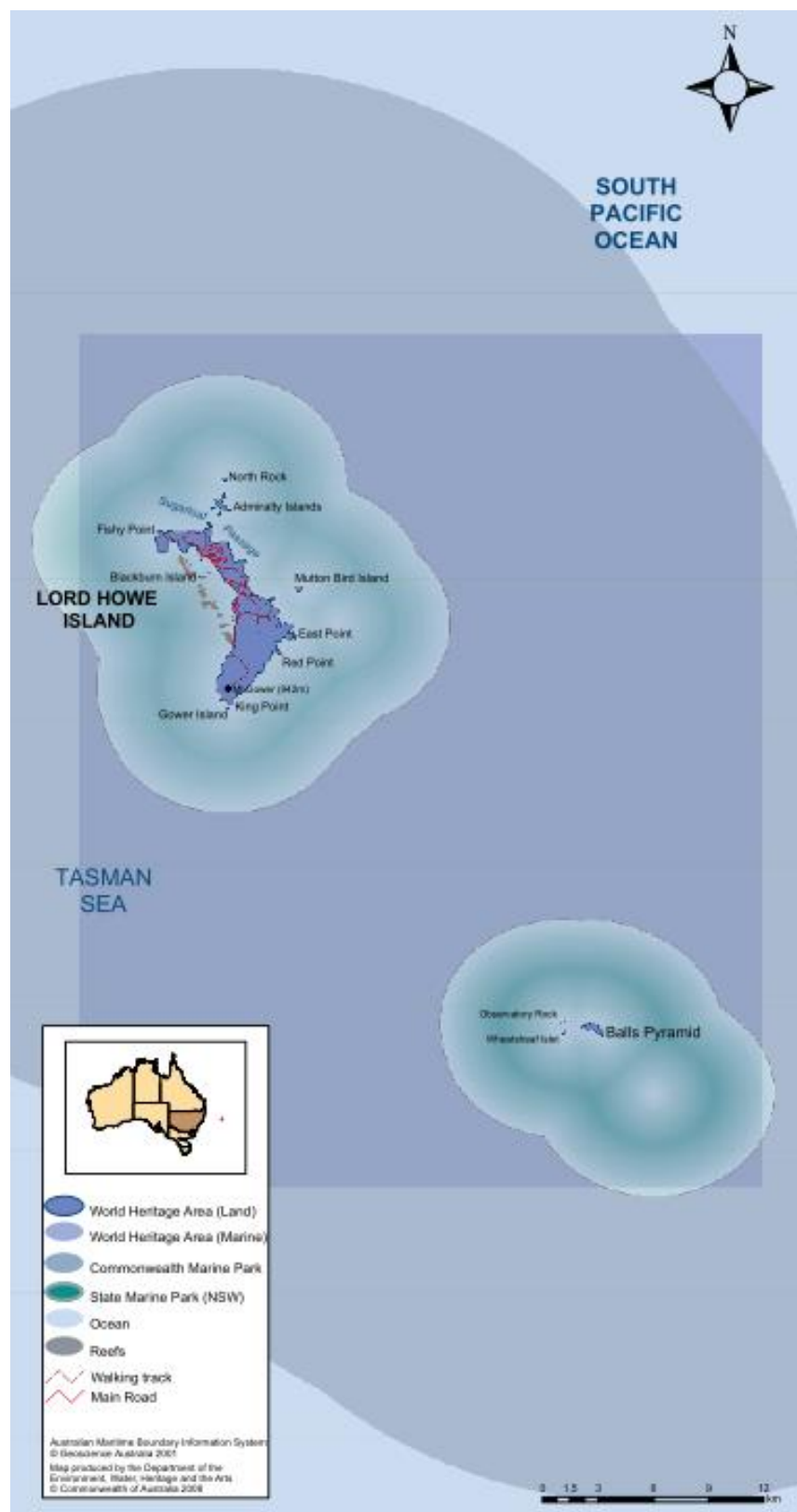


Figure 1.1: Lord Howe Island Group World Heritage boundaries  
 Source: Department of Environment, Water, Heritage and the Arts, nd  
[www.environment.gov.au/heritage/places/world/lord-howe/index](http://www.environment.gov.au/heritage/places/world/lord-howe/index)

**World Heritage Criteria**

Contain unique, rare and superlative natural phenomena, formations and features and areas of exceptional natural beauty

Provide habitats where populations of rare and endangered species of plants and animals still survive

**Lord Howe Island Examples**

Lord Howe Island Group is an outstanding example of an oceanic island of volcanic origin containing features, formations and areas of exceptional natural beauty and aesthetic importance. The World Heritage values include:

- the exceptional diversity of spectacular and scenic landscapes within a small land area; and
- outstanding underwater vistas including reefs considered to be among the most beautiful in the world.

Lord Howe Island Group is an outstanding example of an oceanic island of volcanic origin with a unique biota of plants and animals and important and significant natural habitats for in-situ conservation of biological diversity, including those containing species of plants and animals of outstanding universal significance from the point of view of science and conservation. The World Heritage values include:

- the diversity of vegetation communities which includes 25 associations, 20 alliances and 14 sub-formations;
- the diversity of indigenous vascular plant taxa comprising at least 241 species, including species of conservation significance with many endemics;
- the diversity of bird taxa comprising 164 bird species, including species of conservation significance with many endemics;
- seabird breeding habitats which, together, comprise one of the major breeding sites in the south-west Pacific, including for species of conservation significance;
- high levels of richness and endemism of terrestrial invertebrate taxa including 100 species of spiders of which 50 percent are endemic;
- the unusual combination of tropical and temperate taxa of marine flora and fauna, including many species at their distributional limits, reflecting the extreme latitude of the coral reef ecosystems which comprise the southern-most true coral reef in the world;
- the diversity of marine benthic algae species including at least 235 species of which 12 percent are endemic;
- the diversity of marine fish species including at least 500 species of which 400 are inshore species and 15 are endemic; and
- the diversity of marine invertebrate species including more than 83 species of corals and 65 species of echinoderms of which 70 percent are tropical, 24 percent are temperate and 6 percent are endemic.

Table 1.1: World Heritage criteria on which the World Heritage designation of Lord Howe Island was based

Source: Department of Sustainability, Environment, Water, Population and Communities, 2008

## 1.4 World Heritage – ‘Natural Values’

Lord Howe Island Group comprises Lord Howe Island and all of the offshore islands and rocks of significant size including Admiralty Group, Mutton Bird and Sail Rock, Blackburn (Rabbit) Island, Gower Island and Balls Pyramid together with a number of small islands and rocks and associated coral reefs and marine environments (UNESCO, n.d (b)) (see figure 1.2).

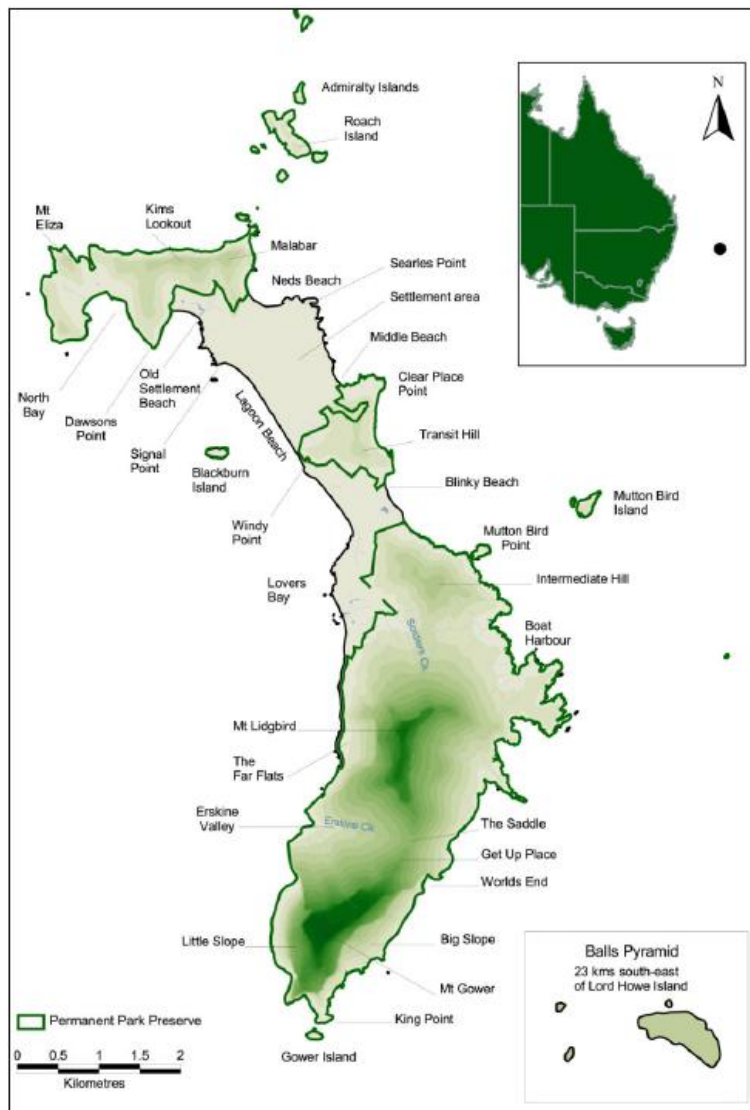


Figure 1.2: Lord Howe Island Group geographical setting

Source: Department of Environment and Climate Change, 2007

The World Heritage designation of the Island Group is based solely on its 'natural values' (see Table 1.1). The following description reflects the prevailing mode of scientific explanation for Lord Howe.

Rising 875 metres above sea level, in scientific terms Lord Howe Island is the eroded remnant of a large shield volcano that erupted from the top of the submarine plateau known as the Lord Howe Island Rise around 6.5 - 7 million years ago. From a geological perspective the Island has significance because it illustrates an exceptional example of an oceanic island of volcanic origin and comprises a number of remarkable volcanic exposures not known elsewhere (UNESCO n.d (b)). The scientific literature emphasises how the Island supports the southernmost 'true' coral reef community in the world, which represents a major contribution to the World Heritage 'natural values' (UNESCO, n.d (b)). Consequently, the Lord Howe Island Marine Park, which includes Commonwealth and State protected areas (see Figure 1.1), was established at the same time as the World Heritage designation of the Island in 1982 (Department of Environment Climate Change and Water 2010 (a)).

In scientific terms the Island's flora and fauna constitute a unique assemblage of species because their evolution has occurred in isolation. The Island has significance from a biological perspective because it supports a large number of endangered and vulnerable species, including numerous endemic plants, marine algae, inshore fish and marine, freshwater and terrestrial invertebrates as well as a small number of endemic terrestrial vertebrates. The scientific literature emphasises that more than half of the invertebrate and plant species on the Island are endemic and found nowhere else in the world, such as the Lord Howe Island phasmid that is at present only naturally occurring on nearby Ball's Pyramid (Hutton 2008).

The Island is also significant in scientific terms because it represents one of the major seabird colonies in Australia and the South Pacific with 14 species of seabirds breeding within the Lord Howe Island Group, including Providence Petrel, Red-tailed Tropicbird, Black Noddy, Brown Noddy, Sooty Tern, White Tern and Masked Booby (Hutton 2008).

Legally and in management terms, the Island is divided into the Permanent Park Preserve and Settlement area (see figure 1.2). The Preserve was created in 1982, the same year as the World Heritage designation. As stated in the Permanent Park Preserve Plan, the creation of the Preserve is:

*The culmination of more than one hundred years of scientific interest in the geology, plants and animals of the Island, and concern for the conservation of its outstanding natural scenery and biota*

The Preserve excludes residential and agricultural lands on the Island. All aspects of human settlement are located within the designated Settlement Area. The scientific literature's emphasis on the Island's natural values silences the social and cultural histories of the Island.

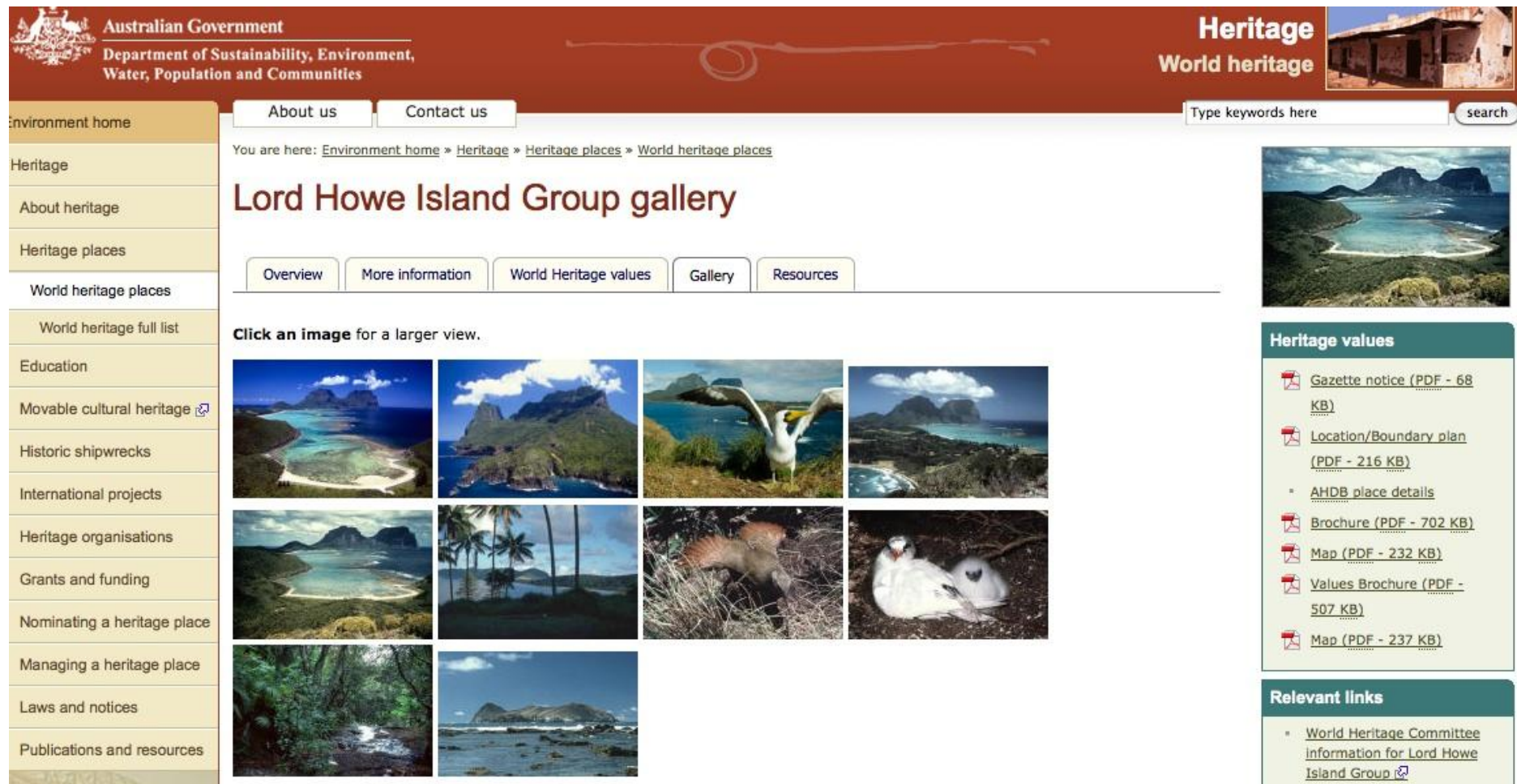


Figure 1.3: Screenshot of Australian Government webpage on the Lord Howe Island Group. This image demonstrates how prioritising of natural values by the World Heritage Convention has given flora and fauna front stage, whilst the human presence is not acknowledged.

Source: Department of Sustainability, Environment, Water, Population and Communities, 2011





Figure 1.4: Image of two Islanders sourced from the Lord Howe Island Museum demonstrates how Islander history foregrounds the human presence on the Island. Regular meetings at the Museum involve Islanders identifying people in old photographs of the Island. This process of engaging Islanders with photos allows Islanders to explore, remember and reaffirm the cultural histories of the Island.

Source: Lord Howe Island Museum

## 1.5 Lord Howe Island – ‘Cultural Values’

Unlike the ‘natural’ values, World Heritage documentation has very little to say about humans. Instead, the social and cultural histories have been documented in written form and captured visually (see figure 1.4) by Islanders and some scholars (Hayward 2002; Heimans 2006)<sup>1</sup>. British sailors discovered the Island in 1788 and settlement commenced in the 1830s (Nichols 2006). Lord Howe Island has been settled for approximately 180 years and today a small residential community of approximately 350 people live on the Island. The Island is Crown land therefore land holdings are only held by lease. Land leases can only be granted to an Islander (*Lord Howe Island Act 1953*, section 20A). However, this has not prevented mainlanders from establishing joint ventures with Islanders in the case of the tourism industry.

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<sup>1</sup> There are a number of other documents that examine the cultural heritage of Lord Howe Island. However, these documents focus on built heritage and tangible heritage items and relics.

The term 'Islander' is defined under the *Lord Howe Island Act 1953* (schedule 3) as:

*"Islander" means, subject to subsection (2), a person who:*

*(a) resided on the Island immediately before the commencement of Schedule 1 (2) (c) to the Lord Howe Island (Amendment) Act 1981, and was an Islander within the meaning of this Act as in force immediately before that commencement,*

*(b) has resided on the Island continuously since that commencement and for the period of 5 years that immediately preceded that commencement,*

*(c) resides on the Island and has so resided continuously during the immediately preceding period of 10 years, or*

*(d) is, on the recommendation of the Board made in special circumstances, declared by the Minister, by order published in the Gazette and for the time being in force, to have retained or acquired the status of an Islander.*

The residential community is diverse and includes: Islanders who can trace lineal descent to the early settlers; Islanders by law, that is, individuals who have gained their Islander status by residing on the Island continuously for a period of 10 years and non-Islanders that are living and working on the Island temporarily.

### **1.5.1 Demographic Context**

Figure 1.5 shows changes in population by age group on Lord Howe Island from 2005 – 2009. Children aged between 0-14 make up the largest population of residents on the Island in 2009. This indicates that a large number of families with young children live on the Island.

The second largest population of residents on the Island in 2009 are those aged 45-55 years, indicating that a large amount of residents are nearing retirement age. Employment on the Island is limited to the tourist industry, trades and the government department on the Island. Hence, a lot of Islanders leave the Island to pursue careers on the mainland and return to retire. Figure 1.5 also shows a

dramatic decrease in residents aged 65 years and over. This may be because of the lack of aged care services on the Island (Lord Howe Island Board 2010).

There is not a large population of residents aged 15-34 years in 2005 and 2009. This indicates that there is a relatively small population of teenagers and young adults living on the Island (see Figure 1.5). A reason for this may be that most Island children attend Boarding schools on the mainland to complete their higher school education. Moreover, the number of new houses built on the Island is limited to 25, over a 20-year period. In addition, housing affordability and construction costs are high on the Island. These regulations, combined with building costs, mean that younger generations of Islanders may not be able to live on the Island (Lord Howe Island Board 2010).

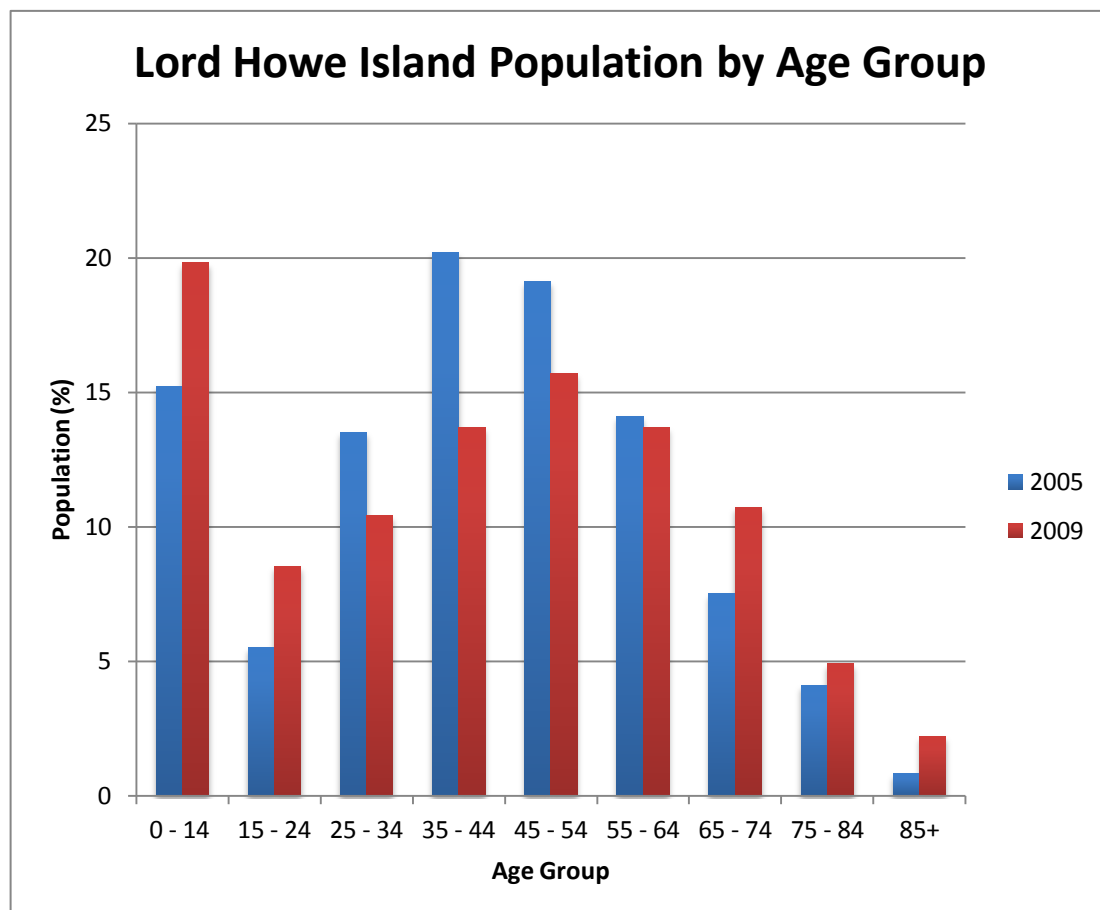


Figure 1.5: Population by age group on Lord Howe Island 2005 - 2009

Source: Australian Bureau of Statistics, Lord Howe Island

<http://www.abs.gov.au/AUSSTATS/abs@nrrp.nsf/Latestproducts/125108859Population/People120052009?opendocument&tabname=Summary&prodno=125108859&issue=2005-2009L>

### **1.5.2 Economic Context**

Whaling, horticulture, and most recently tourism are how Lord Howe Island became integrated into the capitalist world economy. During the 1830s Lord Howe Island was a major provisioning port for whaling ships, supplying food, water, wood and respite. Due to this trade, the Island remained a mostly cashless society for more than forty years. However, with the discovery of petroleum and the onset of the American Civil War, the whaling industry suffered a rapid decline during the 1860s. From 1873 onwards, the Island depended on self-sufficiency and exporting food products such as red onions to Sydney markets (Nichols, 2006).

In the late 1870s the Kentia Palm industry was established on the Island. This industry involved the trade of Kentia Palms (an endemic species to the Island) and seed to the mainland and countries such as Europe where the palm was greatly sought after as an exotic indoor plant. This trade sustained the Island economy for a number of years. However, the industry suffered several setbacks including the onset of World War One (1914) and World War Two (1939), which led to a decline in the Island's shipping service and in the market for luxury items such as Kentia Palms. Furthermore, the introduction of rats to the Island in 1918 led to a decline in the Kentia Palm and seed harvest. Rats ate palm seeds and preyed on bird species that had controlled weevils that damaged Kentia Palms (Hutton 2007). The Kentia Palm seed industry still survives on the Island today. In 1978 the Lord Howe Island Board established a Kentia Palm nursery (Nichols 2006). According to Hutton (2007) this is now the largest Kentia nursery in the world, producing 3 million seedlings each year.

The tourism industry commenced in 1932 with Burns Philip Steamships transporting visitors from the mainland. Some Islanders initially welcomed guests into their home and only later was other accommodation built (Hutton 2007). Today, tourism is the major industry on the Island. As stated in the Lord Howe Island Community Strategy (2010:26), "Currently, the Island attracts over 15,000 annual visitors, up from 11 000 in 2001. It contributes to in excess of 25 million dollars per annum to the Island economy." Tourism is considered the

'lifeblood' sustaining the Lord Howe Island community. However, this single industry is vulnerable to global forces and a reliable air service. For example, presently tourism flows are threatened by the decommissioning of the Dash-8 aircraft and a lack of suitable replacement aircraft to land on the present airstrip (Lord Howe Island Board 2010).

### **1.5.3 Cultural Context**

A number of important events have shaped the Island's history. The decline in the whaling industry in the 1860s led to a decline in the number of ships visiting the Island, increasing the isolation and remoteness of the Island and forcing Islanders to rely on the Island's natural resources. These included native and introduced species such as goats, pigs, poultry, dairy cattle, mutton bird chicks that were smoked and cured, fish, vegetables and grains. Goatskins and flour bags were used to make clothing and Kentia Palm was used to thatch roofs and walls of homes (Nichols 2006). In Nichols (2006:70) words, "the Islanders endured the lean years with determination. They learned to make do with what they had; and found alternatives for what they did not have." Hence, from an early stage in the Island's history Islanders learnt to be self-sufficient, self-reliant and resourceful.

Struggles in relation to land tenure have been a major source of contention on the Island. For many years Islanders held no real tenure over their residential land and were basically squatters (Hutton, 2007). According to Nichols (2006), the Islanders fight to gain security over title of their land spanned 106 years. Land tenure was finally acknowledged by the *Lord Howe Island Act* 1953, which granted direct descendants of Islanders, who held permissive occupancy in 1913, perpetual leases on blocks of up to 5 acres for residential purposes. However strict conditions applied to these perpetual leases:

- a person could not hold more than one lease;
- the island had to be the leaseholder's permanent place of residence;
- a lease could transfer by will only to lineal descendant of an Islander; and
- a lease was transferable by sale to outside interests provided no Islander expressed an interest (Nichols, 2006). As stated in the *Lord Howe Island*

*Act 1953 section 23 (4):* “The Board .. shall not recommend the granting of consent to a transfer or subletting to any person other than an Islander unless satisfied that there is no Islander who desires and is in a position to take a transfer or sublease..”

The arrival of ‘outsiders’ on the Island created tensions within the Island community. Under the *Lord Howe Island Act 1953*, these non-Islanders were denied equal rights to Islanders – they were not able to be represented on the Island Committee and their children had no future land rights. Consequently, a *Lord Howe Island Amendment Act* was passed in 1981 that included all settlers who resided on the Island continuously for a period of 10 years to have both political and land rights. This was resented by Islander descendants whose forbearers had fought long and hard to gain land rights and recognition of their Islander status. Land tenure remains a contentious issue on the Island today (Nichols 2006).

Scientists have long taken a keen interest in Lord Howe Island due to its endemic and diverse array of flora and fauna, unique topography and geology and landscapes (Hutton 2007). According to Hutton (2007:48), Islanders’ extensive local knowledge of the Island has facilitated scientific research on the Island – “In many of these studies, Islanders have played an important role: guiding scientists, helping parties get to remote areas such as Mount Gower and the offshore Islets, and supplying local knowledge of plants and animals.”

#### **1.5.4 Policy Context**

Lord Howe Island falls within the jurisdiction of the State of New South Wales, Australia. Issues of governance and land and conservation management are mainly dealt with under legislation enacted by the New South Wales Parliament. However, because Lord Howe is World Heritage listed there is one significant Commonwealth law that applies to the Island, *the Environment Protection and Biodiversity Conservation Act 1999* which is discussed below.

The Lord Howe Island Board (“the Board”) was established by the *Lord Howe Island Act 1953* (Parts 2 and 3) and the *Lord Howe Island Regulation 2004* (Part 2). Land management issues on the Island are framed by other legislation

particularly the *Environmental Planning and Assessment Act 1979* and the *National Parks and Wildlife Act 1974*. As outlined below, the relationship between these three pieces of legislation is complex.

Under the *Environmental Planning and Assessment Act*, land use on the Island is controlled under the *Lord Howe Island Local Environmental Plan 2010*. Where threatened species listed under the *Threatened Species Conservation Act 1995* are present on land, this planning legislation has to be read along with the threatened species legislation. In some circumstances, a threatened species impact statement has to be prepared for development proposals.

The Lord Howe Island Permanent Park Preserve was set up under the *Lord Howe Island Act* (section 19A and Schedule 1). This area is not managed by the NSW Office of Environment and Heritage under the *National Parks and Wildlife Act*, but by the Lord Howe Island Board (*Lord Howe Island Act*, sections 15B, 20). However, the plan of management for the Preserve is made under the provisions of Part 5 of the *National Parks and Wildlife Act*. Development and activities in the Preserve must comply with the provisions of the management plan (*Lord Howe Island Act*, s 15B).

A number of other environmental laws apply to the Island, just as they apply to the mainland. However, the *Lord Howe Island Regulation* Part 5 contains some specific provisions relating to aspects of environmental protection and conservation, including provisions controlling damage to flora and fauna and importation of seeds and plants. Cats are prohibited on the Island, and dogs must generally be desexed before they can be brought on to the Island.

An additional complication arises from the fact that legislation of the Commonwealth Parliament also applies in certain circumstances because Lord Howe is listed on the World Heritage List. The *Environment Protection and Biodiversity Conservation Act 1999* provides that actions that are likely to have a significant impact on world heritage values of the Island must be assessed and require the approval of the Commonwealth Minister for the Environment before they can proceed (section 12). This would include actions authorised by the Board or the NSW Minister for the Environment.

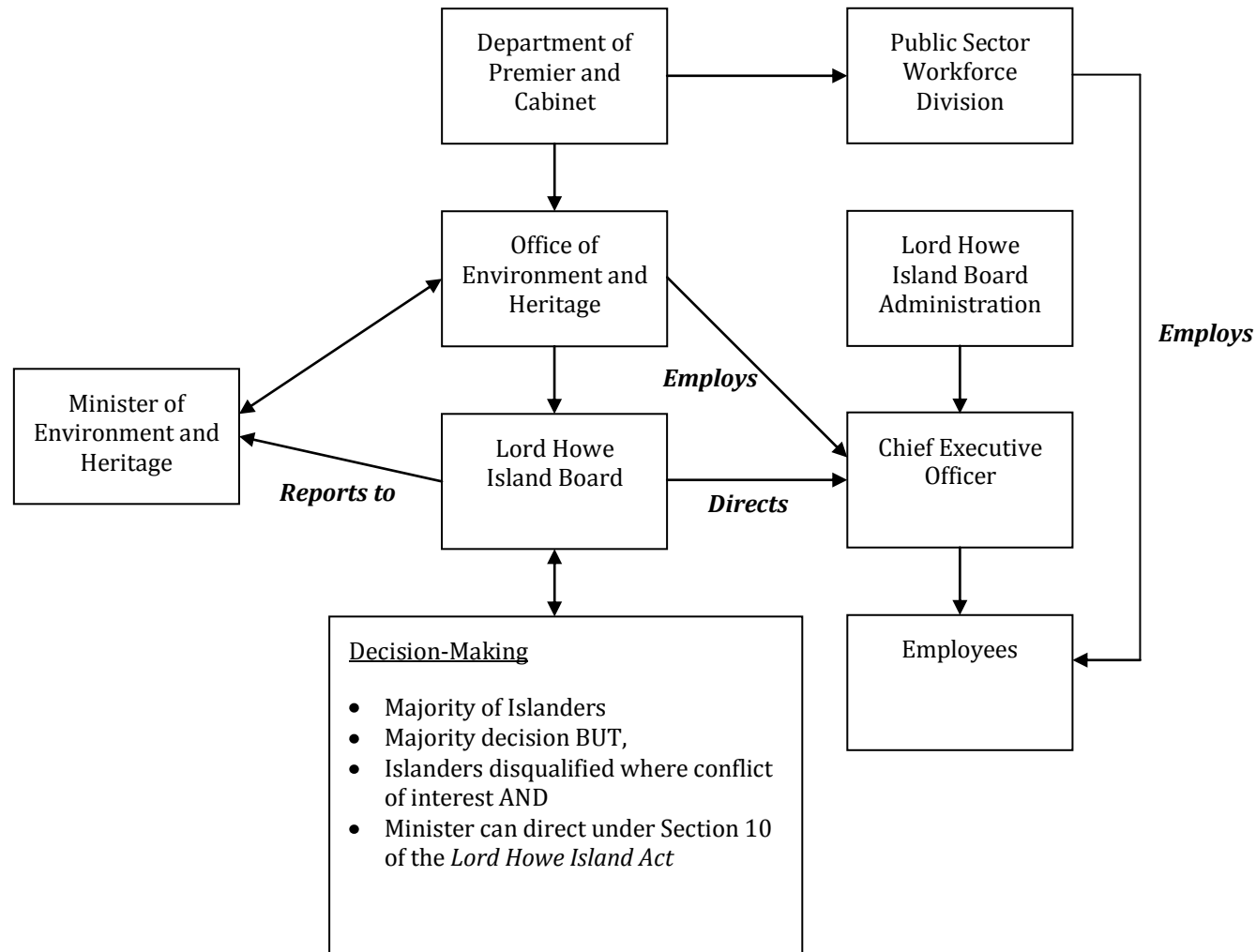


Figure 1.6: Lord Howe Island Governance Structure.  
Source: *Lord Howe Island Act 1953*



The Lord Howe Island Board is responsible for the administration of the Island. The Board cannot appoint its own staff (*Lord Howe Island Act*, section 12). Staff are generally employed by the Public Sector Workforce Division of the NSW Department of Premier and Cabinet. However, the Chief Executive Officer is employed by the NSW Office of Environment and Heritage, also located in the Department of Premier and Cabinet, and reports to the Director of the Parks and Wildlife Group, Metropolitan Branch (see Figure 1.6), although this is “primarily for administrative and human resource functions” (S.Wills pers. comm. 2011).

The Chief Executive Officer is responsible for carrying out the decisions of the Board. This places the Board at the centre of the decision-making process. The Board consists of four Islanders and three others (*Lord Howe Island Act*, section 4), which means that Islanders are in the majority when it comes to making decisions. Non-Island Board members include: one member that is an Officer of the Office of Heritage and Environment, a member representing conservation and one member representing business and tourism (see Figure 1.7).

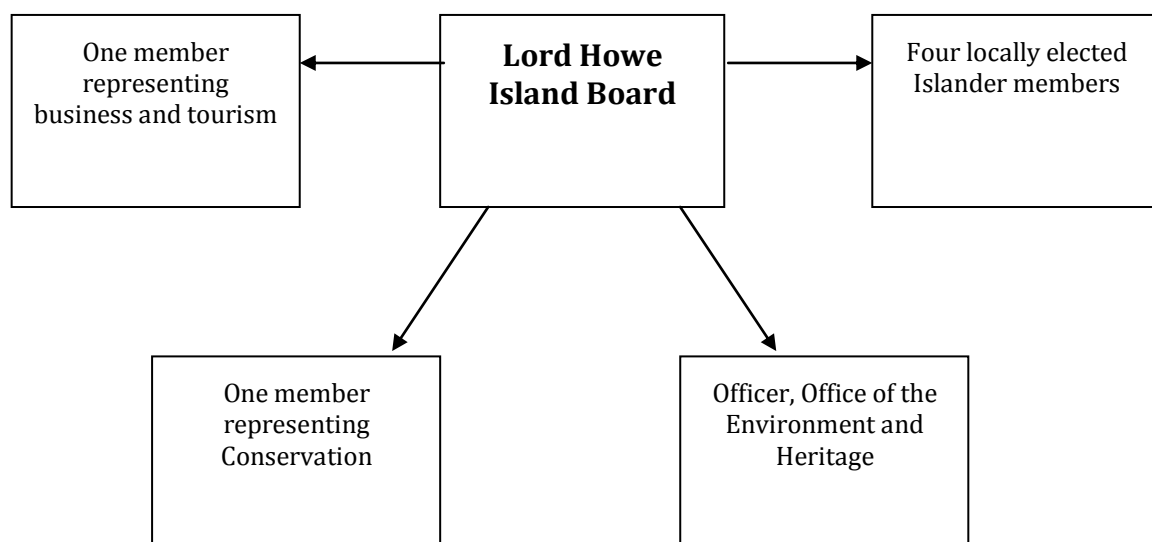


Figure 1.7: Lord Howe Island Board Structure  
Source: *Lord Howe Island Act 1953*

There are, however, two important qualifications to the ability of Islanders to determine their own affairs. Firstly, the Board is placed under the “direction and

control” of the NSW Minister for the Environment (*Lord Howe Island Act*, section 10). This means that if, for example, the Board was not prepared to grant approval for the proposed rat eradication program (see Chapter Five), the Minister could overrule. Secondly, when matters are being considered by the Board, members must disclose any “direct or indirect pecuniary interest, or any other interest”. They are then excluded from making decisions, unless the remaining members determine that they can stay (*Lord Howe Island Act*, Schedule 1A, clause 8).

The quorum for a meeting is four members (*Lord Howe Island Act*, Schedule 1A, clause 12). The presiding member, usually the Chairperson, has a casting vote. The current Chairperson is not an Islander but the Director of the Parks and Wildlife Group, Metropolitan Branch in the Office of Environment and Heritage. This means that even if only one Islander has to disqualify themselves because of a conflict of interest, decisions can be made without the agreement of Islander members. While the other Islander members can still participate they are no longer in a majority. If, however, all four Islander members disqualify themselves, so that there is no longer a quorum present, the decision is made by the Minister for the Environment “after consultation with such Islanders as... she considers appropriate” (*Lord Howe Island Act*, Schedule 1A, clause 8).

Subject to these two qualifications, the Board is responsible for deciding whether or not to grant development consent under the *Environmental Planning and Assessment Act* (*Lord Howe Island Act*, section 15A). In other areas of the State, local councils are primarily responsible for determining development applications, but they are placed under the supervision of the Minister for Planning rather than the Minister for the Environment.

The foregoing detailed description of legal and regulatory processes on the Island is necessary as issues of decision-making and autonomy recur in the interviews described in subsequent chapters. Lord Howe is unique in that, because of the World Heritage listing, the Minister for the Environment and the Office of Environment and Heritage has a significant role in the management of the Island, not only in the Permanent Park Reserve but throughout the Island, including the Settlement Area.

Figure 1.8 below indicates the administrative structure on the Island. The 'Environment and Community Development' strand indicates the spectrum of staff involved in environmental management activities. These are the staff referred to as 'environmental managers' in the discussion in subsequent chapters.

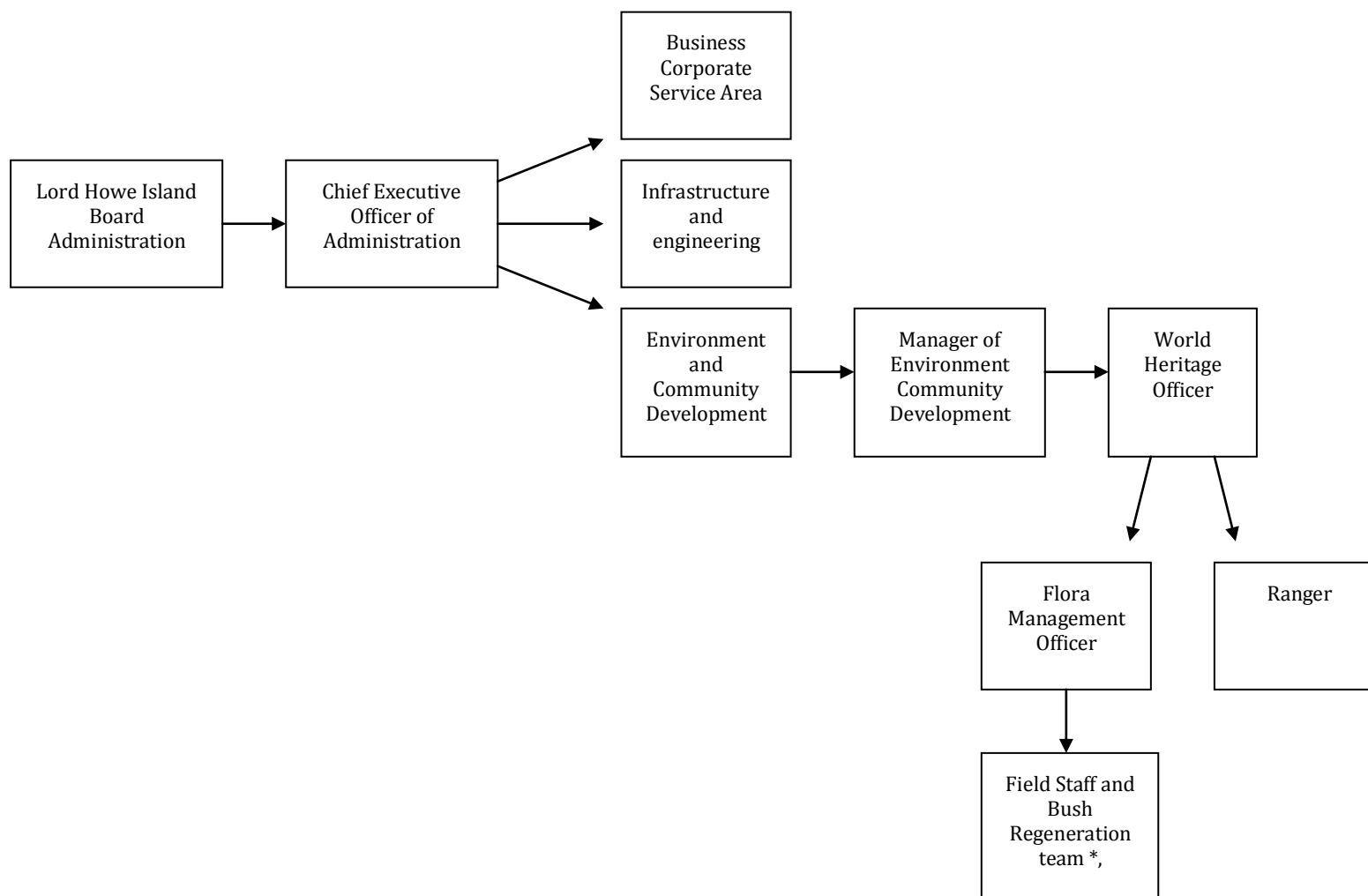


Figure 1.8: Lord Howe Island Board Administration Structure

Source: Stephen Wills, 2011

\*including Field Supervisor, Bush Regeneration Supervisor, Senior Field Officer and Field Staff.

## 1.6 Thesis Structure

To address the research aims, this thesis is structured into seven chapters. Chapter Two presents a review to situate the study in three strands of literature: World Heritage, islands and cultures of natures. This chapter specifically addresses the first and third aims by outlining the concepts that underpin World Heritage and a conceptual framework. The conceptual framework draws on so-called hybrid ideas of nature as both materially and socially constituted, and acknowledges the different types of knowledge that inform how Islanders and environmental managers may care for the Island. The conceptual framework enables a critical exploration of participants' island, nature and World Heritage talk. Chapter Three turns to the methodological aim of the thesis. Chapter Three outlines how conducting island research requires a specific methodology. The limitations and strengths of a mixed-methods approach combining critical reflexivity, surveys, and semi-structured interviews are outlined. Particular attention is given to the concept of cultural protocol and the importance of community engagement in conducting island research.

Chapters Four, Five and Six present results. Chapter Four specifically addresses the third aim and investigates the different sets of ideas that inform *how* and *why* residents care for the Island. This chapter reveals that environmental managers and Island residents draw on different knowledge-making practices that bound the Island in different ways. Chapter Five documents a number of case studies to demonstrate how different types of knowledge help explain environmental management conflicts on the Island. These case studies reveal that environmental management *processes* lead to conflict on the Island by prioritising scientific knowledge. Chapter Six addresses the first aim by putting the concepts of World Heritage discussed in Chapter Two into practice. This chapter outlines how World Heritage may offer a platform through which different environmental knowledge may be involved in the process of decision-making. This chapter reveals that many Island residents understand the World Heritage designation for 'natural values' as undervaluing the 'cultural values'.

Chapter Seven concludes the thesis by suggesting wider lessons for heritage management arising from the project.

## Chapter Two: Literature Review



Old Settlement Beach

### 2.1 Introduction

The aim of this chapter is to situate the research by reviewing three fields of literature. First, a discussion is provided of the literature regarding the implementation of the World Heritage Convention and the development of the notion of world heritage. Second, a range of literature relating to islands is discussed. Finally, the geographical literature of ‘cultures of natures’ is explored.

### 2.2 World Heritage

Since the adoption in 1972 of the United Nation Economic, Scientific and Cultural Organisation’s (UNESCO) *Convention Concerning the Protection of the World Cultural and Natural Heritage* (referred to hereafter as the World Heritage Convention or the Convention), scholars from a number of disciplines have explored the concept of ‘*World Heritage*’. Hence, an extensive literature surrounds the topic of World Heritage. This review notes landmark studies to sketch out a brief history of the World Heritage Convention and the development

of the concept of World Heritage. Particular attention is given to amendments of the World Heritage Convention over the last decade.

According to UNESCO, the Convention is a unique international instrument based on “..the idea that some cultural and natural heritage sites are of universal and exceptional importance and need to be protected as part of the common heritage of humanity.” (UNESCO 2007). Following Rossler (2002:10), “the purpose of the Convention is to ensure the identification, protection, conservation, presentation and transmission to future generations of the cultural and natural heritage of ‘outstanding universal value’.” As set out in the *Operational Guidelines*, to be considered for inscription on the World Heritage list, properties must meet the conditions of ‘integrity’ and ‘authenticity’ and be of ‘outstanding universal value’: “to be deemed of outstanding universal value, a property must also meet the conditions of integrity and/or authenticity and must have an adequate protection and management system to ensure its safeguarding.” (UNESCO 2008). According to Alberts and Hazan (2010:60), “the notion of integrity refers to the goal of maintaining all the critical elements of a site intact.” Integrity is defined in the *Operational Guidelines* as “... a measure of the wholeness and intactness of the natural and/or cultural heritage and its attributes.” (UNESCO 2008). In broad terms, authenticity suggests that cultural heritage values must be “truthfully and credibly expressed through a variety of attributes” (UNESCO 2008, paragraph 83). However, Alberts and Hazan (2010:60) argued “evaluating authenticity is ... complex, owing both to the vagueness of the concept and to the cultural assumptions embedded in it”.

Following the *Operational Guidelines*, a property must meet one or more of the ‘criteria for the assessment of outstanding universal value’ to be nominated for World Heritage. Hence, the notion of ‘outstanding universal value’ is central to the Convention (UNESCO 2007). Although this concept represents a ‘noble expression, a common critique is the ‘somewhat vague’ meaning of ‘outstanding universal value’ (Cleere 2000:14). Important questions are raised about whose value systems are employed in defining the benchmark criteria and the priority given to particular knowledge systems (Cameron 2005; Jokilento 2008). Cameron (2005) and Titchen (1996) represent benchmark papers providing



discussion based on the notion of 'outstanding universal value'. Cameron (2005) points out that the notion of 'outstanding universal value' is not clearly defined by the Convention. Hence, Cameron (2005: 71) explores the question, "Does outstanding universal value mean the best of the best or does it mean a representative of the best? In other words, is outstanding universal value limited to unique sites or does it extend to several sites that represent the same type of property?" In doing so, Cameron (2005) reviews the implementation of the notion by the World Heritage Convention over the years in terms of natural and cultural heritage applications. Titchen (1996) noted that there is no definition of 'outstanding universal value' in either the World Heritage Convention or the Operational Guidelines. However, she argues that the interpretation of this concept's meaning is being developed overtime through the "... wording and application of the criteria used to identify and assess cultural and natural heritage for inclusion in the World Heritage List (Titchen 1996:239).

The implementation of the Convention involves an extensive system of actors existing at international, national, regional and local geographical scales. These include, the State Parties at all levels (national government to site managers); the World Heritage Committee; the General Assembly; the Secretariat and three Advisory Bodies: the International Union for the Conservation of Nature (IUCN), which specialises in 'natural heritage'; the International Centre for the Study of Preservation and Restoration of Cultural Property (ICCROM) and International Council on Monuments and Sites (ICOMOS), which both specialise in cultural heritage (UNESCO, 2007).

The 'Operational Guidelines for the Implementation of the World Heritage Convention' (referred to hereafter as the Operational Guidelines) represent the basis for implementing the Convention, detailing procedure for inscribing World Heritage properties as well as protecting and assisting them (Alberts and Hazen, 2010). Representing a detailed working document, the Operational Guidelines are regularly revised by the World Heritage Committee to reflect the concept of cultural and natural heritage as it has evolved (UNESCO, 2007). The Guidelines have been revised 18 times since the first version was published, with the most recent being 2011 (UNESCO, n.d (a)).

### **2.2.1 The Changing Notion of World Heritage**

“.. the World Heritage idea has proved to be a more powerful and adaptive concept than its creators probably envisaged - like the spreading of ripples in a pool, the unsophisticated, naively unselfconscious original ‘Western’ idea has gradually widened and deepened, affected by the range of societies and ideals which it has reached..” (Sullivan 2003:54)

Sullivan argues that the concept of World Heritage is far from static. Sullivan emphasises that the concept of World Heritage in the original convention was based on Western worldview (Sullivan 2003, Titchen 1996). Consequently, Western cultural and scientific origins of the World Heritage Convention are then reflected in early World Heritage listings. Locations recommended for World Heritage listing were those that displayed “... the most monumental or information rich historic sites ...” and “... the purest and most pristine natural areas.” (Sullivan 2003:50). The World Heritage list in the late 1970s displayed a bias towards monumental architecture and an over-representation of European cultural heritage (Cleere 2000; UNESCO 2004).

This resulted in a number of initiatives set up by UNESCO related organisations to correct these imbalances, including: a noteworthy review of the criteria for the inscription of properties onto the World Heritage list (Parent 1979); the ‘The World’s Greatest Natural Areas: An indicative inventory of natural sites of World Heritage quality’ in 1982 (UNESCO 2004); the ‘Global Study’ in 1987; and the ‘Global Strategy for a Representative Balanced and Credible World Heritage List’ in 1994 (Labadi 2005).

In 1982, the IUCN World Heritage Commission for Protected Areas created a ‘tentative inventory’ for natural properties entitled ‘The World’s Greatest Natural Areas: An indicative inventory of natural sites of World Heritage quality’ (UNESCO 2004). The objective of the list was to help to remedy the growing disparity between cultural and natural sites represented on the World Heritage

list in the 1980s. A number of sites were identified. However, according to UNESCO (2004), not all of them had been inscribed on the World Heritage List in 2003.

The imbalances of sites designated for their cultural world heritage has been revisited a number of times since 1972. The criteria for the designation as a cultural World Heritage site were reviewed as part of the 'Global Study' in 1982. Labadi (2005:90) argued that the aim of the Global Study was to:

..identify gaps on the World Heritage List to encourage the nomination of those under-represented categories, to guide State Parties in the preparation of Tentative Lists and nominations, to aid the World Heritage Committee in the examination of cultural properties by providing a comparative analytical framework of the world's cultural heritage.

The Global Study employed a typological framework to analyse the World Heritage list and available tentative lists. Petzet (2004:5) contends that this framework was "based on categories that have been used for the classification of cultural heritage in past ICOMOS evaluations of nominations for inclusion in the World Heritage List" (ICOMOS, 2004:5). Consequently this approach was critiqued for its focus on 'historic and aesthetic civilisations' which resulted in the exclusion of "... less formally acknowledged cultural phenomena and regions." (Labadi 2005:90).

Labadi (2005) noted that geographic, thematic and chronological gaps still existed in the World Heritage List in 1994 despite the efforts of the Global Study. In addition, Labadi (2005) recognised that there remained an:

... over-representation of Europe in relation to the rest of the world, as well as the over-representation of historic towns and religious buildings, in particular Christian ones, in comparison with other types of heritage, including vernacular architecture and the heritage of the 20<sup>th</sup> century.

Western historical cultural heritage still was given priority despite efforts to acknowledge cultural diversity. Moreover Labadi (2005:90) also noted that "... living cultural heritage manifestations and their diverse and complex

relationships with their environments were under-represented..” UNESCO became alert to critiques of heritage as being relegated to the past, the dead and the monumental; and was encouraged to embrace understandings of heritage that embraced the everyday and the living. In 1992, the incorporation of the term ‘cultural landscape’ into the Convention reflected this transformation of the understanding of culture. As noted by Head (2000:83), this alternative working definition of culture resulted in a “.. shift away from emphases on monuments and buildings, towards considering the physical and social contexts in which structures are found..” and “..increasing recognition of the intangible dimensions of landscape, and interactions between the physical and the spiritual/symbolic.” (Head 2000:83).

In 1994, the ‘Global Strategy for a Representative Balanced and Credible World Heritage List’ implemented by the World Heritage Convention reflected this alternative understanding of culture. A different approach was adopted to address the global imbalances represented in the World Heritage List. Rather than employing a typological approach, the ‘Global Strategy’ adopted a thematic approach. The aim of a thematic approach reflected the shift from a ‘monumental conception’ of cultural heritage to a ‘diversified and holistic vision’. This approach encompassed a wider recognition of the nature-culture continuum (Labadi 2005). Cameron (2005:72) states that “... unlike the sterile and static study of Global Study ... the Global Strategy was a dynamic, open-ended process, based on broad categories of universal application.” Underpinning the Strategy was the belief that in order to be credible, the World Heritage list needed to be representative of the diverse cultures and regions of the world (Cameron 2005). In an attempt to ‘remedy’ the imbalances represented in the List, a set of broad themes were identified:

(1) Human coexistence with the land:

- Movement of peoples (nomadism, migration)
- Settlement
- Modes of subsistence
- Technological evolution

(2) Human beings in society:

- Human interaction
- Cultural coexistence
- Spirituality and creative expression (Labadi 2005:91)

Since 1994, literature questioning the credibility and representativeness of the World Heritage List continues to emerge (Cleere 2000; Akagawa and Sirisrisak 2008; Rao 2010). In parallel to these discussions in the literature, the Convention continues to work towards a balanced and representative World Heritage List (UNESCO 2004; UNESCO 2007).

### **2.2.2 Cultural and Natural Heritage**

The notions of cultural and natural heritage values have evolved over the 40-year history of the World Heritage Convention. Kirshenblatt-Gimblet (2004) highlighted significant developments to the concept of natural heritage values. She contended that natural heritage, initially defined in terms of “... outstanding physical, biological, and geological features; habitats of threatened plants or animal species and areas of value on scientific or aesthetic grounds or from the point of view of conservation ... untouched by humans presence” now recognises that most natural properties on the World Heritage list have been ‘shaped’ or ‘affected’ by people (Kirshenblatt-Gimblet 2004:53). In regard to cultural heritage values, ICOMOS (2004) contended, “since the World Heritage Convention came into effect in 1975, concepts of cultural heritage have greatly expanded beyond the initial approach and now include aspects such as cultural landscapes, technological/agricultural heritage, cultural routes and modern heritage, as well as the cultural significance of natural features”.

Although World Heritage properties may be cultural, natural or mixed (Phillips 2002), Head (2000) argued that demarcations of culture-nature by the World Heritage Convention is apparent in the implementation of Convention. In terms of natural and cultural heritage, the World Heritage Committee is advised by two distinct advisory bodies - the International Union for the Conservation of Nature advises on natural heritage issues and the International Committee on Monuments and Sites advises on cultural heritage issues (Head 2000). This culture-nature distinction is underpinned by dualistic thinking and Western

knowledge systems that constitute culture as independent of nature and privilege science (Head, 2000).

Academic debates have shown that distinctions between culture and nature are problematic. Lennon (2000) questioned “how cultural places within areas which are recognised and managed for their natural qualities be best identified, assessed and managed to conserve both cultural and natural values which at times may seem to conflict.” She argued that a ‘holistic’ and ‘integrated’ approach must be employed when examining heritage places rather than reinforcing the demarcation of culture-nature whereby one set of values is emphasised over the other especially in the case of cultural values within areas recognised and managed for their natural values (Lennon 2000). Equally, McIntyre-Tamwoy (2004) contended that World Heritage properties are often managed in terms of their outstanding universal values, that is, the rationale for their inscription on the World Heritage List. She explored the notion of ‘social value’, arguing that the distinction between natural and cultural values is artificial and “while places exist independently in time and space from people, the ‘meaning’ and significance of places cannot be divorced from human experience and culture.” (McIntyre-Tamwoy, 2004:293).

Interest in conservation of natural values often leads to the restriction of traditional practices and land use (Sullivan, 2003). Russell and Jambrecina (2002) explored the community and cultural values associated with the Tasmanian Wilderness World Heritage area that is managed according to ‘wilderness preservation’, which situates people as a problem, detrimental to the conservation of nature. As a result, local stakeholders with deep sense of attachment to place were essentially ‘locked out’ of the area after the World Heritage designation. Russell and Jambrecina (2002) argued that community involvement is essential for the effective protection of natural and cultural heritage.

### **2.2.3 Cultural Landscapes: Beyond the Culture-Nature Binary**

According to Rossler (2002) the inclusion of the concept of cultural landscape represented a milestone achievement for the World Heritage Convention. The notion of 'cultural landscape' was brought about by fifteen years of intensive debate about how to protect sites where interactions between people and the natural environment are manifest. The notion of 'cultural landscape' has been discussed extensively in the literature (Akagawa and Sirireisak 2008; Feliu 2002; Head 2000; Krauss 2005; Phillips 2002; Placter *et al.* 1995). In particular, Fowler (2002) represents a landmark paper, presenting a 'global review' on the notion of cultural landscapes. In addition, Rossler (2000; 2002; 2006) presents an extensive examination of the conception of the notion of cultural landscape within the World Heritage paradigm, noting the many positive effects it has had on the World Heritage Convention including the "... recognition of the diversity of manifestations of the interaction between humankind and its natural environment; introduction of the term 'sustainability' into Operational Guidelines; acceptance of the 'living heritage' of Indigenous people; introduction of traditional management mechanisms into the Operational Guidelines; recognition of traditional forms of land use; maintenance of biological diversity through cultural diversity; consideration of spiritual relationships to nature; opening of the Convention to other regions and cultures of the world.." (Rossler, 2002:10). The definition of cultural landscapes embraces three categories: 'Clearly Defined Landscapes', 'Organically Evolved Landscapes' and 'Associative Cultural Landscapes'. The inclusion of the term 'Associative Cultural Landscapes' as a category in the World Heritage Convention has been integral to the recognition of intangible heritage values and, as a consequence, the acceptance of local community and Indigenous heritage values (Rossler 2002; 2006; Head 2000).

## 2.2.4 Intangible Heritage

Developing notions of World Heritage have gradually embraced the concept of intangible cultural heritage. In 1989, the Convention adopted the 'Recommendation on the Safeguarding of Traditional Culture and Folklore', followed by 'the Proclamation of Masterpieces of the Oral and Intangible Heritage of Humanity' in 2001. Finally, 'the Convention for the Safeguarding of the Intangible Heritage' was adopted by the World Heritage Convention in 2003 (Kirshenblatt-Gimblet 2004).

The notion of intangible cultural heritage has been discussed extensively in the literature (Beazley 2009; Builth 2009; Darian-Smith 2009; Deacon 2004; Griffin-Kremer 2009; Harrington 2004; Kato 2006; Kiriama 2009; Kirshenblatt-Gimblet 2004; Mclean 2009; O'Keeffe 2000; Pascoe 2009; Pocock 2003; Schmitt 2008; Smith et al. 2001; Truscott 2000;). According to Harrington (2009) intangible cultural heritage encompasses non-material aspects of cultural heritage including "what we do and what we experience." (Harrington 2009:19). She contends that "intangible heritage represent the general values and worldviews of a community and enshrines a community's character and identity" and embraces "processes and cultural activities that transmit ideas, beliefs, values and emotions." (Harrington 2009:19). Such intangible cultural values ascribed by local communities often conflict with professional, international heritage values, such as those ascribed by the World Heritage Convention (Harrington 2004; 2009). Truscott (2000) examines the notion of intangible heritage values in Australia. She argues that intangible cultural heritage values, that are tied to notions of cultural identity and continuity are dynamic, stating that "... intangible values rarely stay the same, they transform through time and adapt to different situations...". She warns that management of intangible values must not be made rigid and static by 'freeze-framing'. Kato (2006) explored aspects of intangible cultural heritage expressed by the local community at Shirakami-sanchi, a World Heritage property listed for its outstanding natural values. She contends that spiritual and place-based identities formed by residents' long-term everyday interactions with nature have formed the local community's conservation



commitment. Consequently, maintaining this intangible cultural heritage is vital to conserving the natural values of the property.

## **2.2.4 Global Local Tensions**

It wasn't until 1995 that the World Heritage Convention recognised local and Indigenous heritage values (Labadi 2005). This is highlighted in Paragraph 14 of the Operational Guidelines, which states, "participation of local population in the nomination process is essential to make them feel a shared responsibility with the States Party in the maintenance of the site." (UNESCO 1996). The importance of involving local communities in the identification, protection and management of World Heritage areas was further recognised by the Convention in the 2002 Budapest Declaration (World Heritage Committee 2002). The UNESCO publication entitled, "Linking Universal and Local Values: managing a sustainable future for World Heritage" and the subsequent conference organised by the Netherlands National Commission for UNESCO presents a diverse range of innovative ideas and approaches for involving "... local communities in all aspects of management of World Heritage properties..." (UNESCO 2003). Sullivan (2003) presents a benchmark paper, examining the tensions that exist between universal and local values ascribed to World Heritage properties. Sullivan (2003) emphasises the importance of heritage values ascribed to place at a local level, stating that "... emphasis on monumentality or grandeur or craftsmanship has often led us to neglect the places of the spirit, and the low-key and subtle signs of our past, which can be of great emotional value to ordinary people." (Sullivan 2003:50). Sullivan (2003) contends that the World Heritage Convention needs to work towards a more inclusive approach in identifying heritage values, arguing that 'best practice' in heritage management involves recognising and conserving all heritage values applied to a place, rather than just the 'primary values' or those considered by the Convention to be of 'outstanding universal value'.

In 1998, the Operational Guidelines were changed to allow a traditionally managed site, East Rennell (Solomon Islands), to be listed as World Heritage, based on its natural values. This represents a significant milestone, as the

Convention acknowledges the significance of 'local knowledge' and the importance of involving local populations in the management of their heritage (Rossler 2006).

Recent discussions in the literature show a growing interest in local populations living in or around World Heritage Properties (Bianchi 2001; Carmody & Prideaux 2008: 2011; Evans 2002; Harrington 2004; 2009; Jimura 2011; Labadi 2005; Kato 2006; Russell and Jambrecina 2002; Smith 2002; Stenske 2007; Krauss 2005; van der Aa *et al* 2005). Harrington (2004; 2009) presents a noteworthy examination of the tensions that exist between global and local heritage values. Three case studies based on three different World Heritage properties are employed to investigate conflict between "professionally ascribed heritage values – based ... on internationally accepted standards and guidelines..." at a international level and heritage values formed at a local level "... grounded in local voices, knowledge and uses." (Harrington 2009:19). Sullivan (2003) echoes this, arguing that community heritage values are often neglected because they do not fit into the formal categories provided by the World Heritage Convention.

A large amount of literature documents the failure of the World Heritage Convention to acknowledge and conserve locally ascribed values at various World Heritage properties - Willandra Lakes, Australia (Sullivan 2003); the Great Barrier Reef World Heritage area (Harrington 2004); Uluru Kata- Tjuta National Park, Australia; Angkor, Cambodia (Sullivan 2003); Wadden Sea (Krauss 2005; van der Aa *et al.* 2005), Garajonay National Park, La Gomera, Canary Islands (Bianchi, 2001); Tasmanian Wilderness World Heritage Area (Russell & Jambrecina 2002; Russell & Johnston 2005); Avebury, England (Harrington 2004; 2009); Borobudur and Prambanan, Indonesia (Wall & Black 2005). Bianchi (2001) examines the tensions and contradictions that have emerged in the process of designating La Gomera as World Heritage based on natural heritage values. Bianchi (2001:81) lists a number of examples to support the argument that "... a sense of the forest as a place of cultural belonging has been marginalised in favour of its intrinsic ecological value." Both Krauss (2005) and van der Aa *et al.* (2005) investigate the controversial World Heritage nomination

of the Wadden Sea. This nomination, based solely on natural values, has been met with considerable resistance by local stakeholders. Van der Aa *et al.* (2005) uses the notion 'not in my backyard' to illustrate the local community's approach to the proposed World Heritage listing.

### **2.2.5 World Heritage: Ongoing Developments**

The concept of World Heritage is a dynamic and developing concept that continues to evolve in parallel to debates and discussions in the literature. 2002 marked the thirtieth anniversary of the World Heritage Convention. Consequently, the strategic objectives of the Convention were reviewed and four 'overarching goals' were established: 'Credibility', to ensure the adequate representation for all types of cultural and natural heritage sites; 'Conservation', to promote the effective conservation of World Heritage sites; 'Capacity-building', to raise the level of management and human skills for conservation; and 'Communication', to inform the public of achievements and challenges ahead (Bandarin 2007). These goals are reflected in the publication entitled 'World Heritage Challenges for the Millenium' (UNESCO 2007) which Bandarin (2007) contends is the first time "...an overall picture of the nature, functioning, operations and issues of the World Heritage Convention" has been presented. The publication highlights a number of challenges that lie ahead for the World Heritage Convention, including: the imbalance of the World Heritage List; effective monitoring and conservation of World Heritage properties; and training for heritage agents (Bandarin, 2007).

As the Convention approaches its fortieth anniversary, the IUCN presents the second 'World Conservation Debate' allowing people to discuss the limitations and advantages of the World Heritage Convention in terms of nature conservation (IUCN, 2011). Pasini (2011) notes the politics surrounding the World Heritage Convention and the implications of tourism on World Heritage Sites. She argues that the ever-expanding World Heritage list, is detrimental to current listings that do not receive adequate funding or attention. The following recommendations are presented:

“Firstly, the Convention needs to rethink its place as part of the broader conservation movement, to put into focus what investing in this Convention means. Secondly, conserving sites that are already listed should take precedence over adding new sites; and thirdly, when looking at new nominations, much more support should be provided earlier on to ensure a more effective listing process that meets countries’ and communities’ expectations.” (Badman quoted in Pasini 2011)

Discussions surrounding the changing notions of World Heritage are pertinent to the study of Islands because of the overwhelming amount of World Heritage listed islands relative to the number of islands globally. According to Baldacchino (2006:3) “Islands occupy just 1.86% of the earth’s surface area, but 13.1% (106 out of 812) of UNESCO’s World Heritage sites (as at February 2006) are on islands...”.

## 2.3 Islands

Islands have played a ‘catalytic role’ in shaping a number of modern disciplines including human geography, social anthropology, ecology, evolutionary biology and biogeography (Dodds and Royle 2003; Szuster and Albasri 2010). In biogeography, ecology and evolutionary biology, islands are simultaneously regarded as ‘repositories of the world’s biodiversity’ and fragile and threatened ecosystems, particularly vulnerable to biotic invasions: “More than half of all known extinctions have occurred on islands.” (IUCN, nd). Courchamp *et al.* (2003:347) argues that this high rate of island extinction results from island species evolving in the “..absence of strong competition, *herbivory parasitism* or predation” producing “..plant and animal communities with relatively little diversification, simplified trophic webs and high rates of endemism.”

Consequently, islands are central to global conservation efforts and there has been a great deal of ecological research based on islands (Bergstrom *et al.* 2009; Caujapé-Castells *et al.* 2010; Courchamp *et al.* 2003; Kueffer *et al.* 2010; Reaser 2007). Dodds and Royle (2003) contend that islands have long been considered ‘natural laboratories’ for scientists, as they represent areas ‘uncontaminated by human beings’ and are ‘sealed off from the wider world’. This depiction of

'islands as laboratories' is echoed by others (Baldacchino 2006; Connel 2003; Kueffer *et al.* 2010). Kueffer *et al.* (2010) state that the very nature of islands - "isolated, replicated systems distributed globally..." signifies the importance of ecological research of island ecosystems, claiming that islands serve as an 'early warning system' for larger continental systems.

Bade (2010) contends that inherent characteristics of islands ('islandness'), including features such as separateness, boundedness, isolation, vulnerability and smallness, make islands 'prime candidates' for ecological restoration. Although cultural heritage is recognised, places of island restoration focus strongly on natural heritage values (Bade 2010). Carter (2010) echoes this, stating that a 'naturalistic gaze' underpins the management of World Heritage listed Fraser Island. She argues that this approach to management of the island reproduces the nature-culture dualism and leads to the disenfranchisement of the local community. Hence, a balance needs to be achieved that ensures "... objectives of natural heritage restoration are met without compromising the cultural heritage." (Bade 2010:26).

Anthropologists have also taken a keen interest in islands (Cohen 1987; Gibbons 2010; Kohn 2002; Malinowski 1961; Mead 1928; Sahlins 1958; 1985). Because of their often small, remote and insular attributes in comparison to metropolitan centres, islands offer a basis for exploring community interactions, belonging, identity and kinship (Dodds & Royle 2003). For instance, Kohn (2002) investigates the way in which belonging is enacted and imagined in an Inner Hebridean Island where a number of different identities are negotiated.

Geographers have also examined the specific relationships forged through the qualities of everyday island life. One strand of geographical research has focussed on the Western representation of islands. According to Tuan, "Certain natural environments have figured prominently in humanity's dreams of an ideal world: they are the forest, the seashore, the valley and the island" (Tuan 1974:247). Islands appear in the Western imagination and literature as utopian spaces, places to escape the rules and regulations of capitalist society. For example, Connel (2003) investigates the "visions that Pacific Islands have

generated” since the first island encounters with Westerners and specifically explores the discourse of utopia. Similarly, Schulenburg (2003) contends that the Western fascination with islands is illustrated through a ‘long tradition’ in English literature, including classics such as Robinson Crusoe, Coral Island and Treasure Island...” which represents islands as ‘places of simplicity, innocence, peace and abundance’. While, Baldacchino (2006:5) contends that “.. travel and tourism have catapulted islands as favoured destinations and rendered them mythical and unreal to the ever-fertile Western imagination.” Tourism studies based on islands investigate the construction of islands as utopian spaces in the Western imagination (Baum 1997).

Another strand of geographical research on islands explores the concepts of attachment, identity and place and the relationships between people (islanders and non-islanders) and their ‘natural environment’ (Bianchi 2001; Gibbons 2010; Harrington 2004). In Hay’s words,

“..islands – real islands, real geographical entities – attract affection, loyalty, identification. And what do you get when you take a bounded geographical entity and add an investment of human attachment, loyalty and meaning? You get the phenomenon known as ‘place’. Islands are places – special places, paradigmatic places, topographies of meaning in which qualities that construct place are dramatically distilled.” (Hay, 2006:31).

Hay (2006) reminds us that islands represent a sense of place. This is echoed by Baldacchino (2005:35) who states, “.. small islands are special because their ‘geographical precision’ facilitates a unique sense of place.” Jackson (2004:2006) suggests that “the boundedness of islands may provide residents with a greater sense of identity and community than mainland counterparts, particularly when faced with external threats to their way of life...” . Stratford (2008:162) echoes this, arguing that “ ... islandness engenders closeness, solidarity, ...” and “In an age of hyper-mobility, islands provide spatial and temporal limits, and foster strong sense of identity.” Stratford (2008: 163) explores the notion of islandness in Tasmania, Australia’s only island state. She suggests that “ ... islands are

constitutive of strong place-based identifications – emotional geographies that may be described as islandness ...”, and goes on to argue that the ontological power of the notion – islandness could aid in “ ... governing for development futures that are agonistically framed and conducive to the protection of place.”

Baldacchino (2006:9) describes ‘islandness’ as “ ... an interweaving variable that does not determine, but contours and conditions physical and social events in distinct and distinctly relevant, ways”. Stratford (2008:160-161) defines the notion of ‘islandness’ as,

“ ... a complex expression of identity that attaches to places smaller than continents and surrounded entirely by water. These identifications include, but are not confined to, strong perceptions of island-self and mainland other, as well as potent connections to island communities and environments. They embrace water, sky and land, flows and boundaries, edges and interiors, isolation and access. No less powerful than place-based identifications among plains or mountains or forest peoples, islandness might be described as a particular (and inevitably contingent) sense of being in place.”

However, the notion of islandness is widely contested in the literature (Baldacchino; 2006; Hay 2006; Jackson 2006; Jazeel 2003; Stratford 2006; 2008). Hay (2006) questions whether a ‘coherent theory of islandness’ is possible, arguing that the term islandness oversimplifies the diversity of islands worldwide that “ ... show a vast variety of geographical, social, cultural, political and economic conditions” (Hay, 2006:20). In contrast to this, Jackson (2006) argues that “ ... islands are subject to a common range of challenges associated with their island status”. For instance, islands have a large amount of coastline (many coastal environments are particularly sensitive to rising sea-levels) but limited natural resources. Furthermore, island populations are often ‘internally fragmented by deep divisions’ in relations to whether and to what extent they should conserve or develop these limited resources and small populations which make islands ‘demographically volatile’.

Whilst there is debate in the literature about the contested nature of islands, in the context of Lord Howe Island there is no disagreement as to the distinct

features of the place that make it a unique island worthy of conservation. Rather, it is naturally accepted that Lord Howe Island is an island in its own right. However, contestation arises in terms of what the Island's distinct features are and how best to manage them.



## 2.4 Cultures of Nature

Geography is one of many disciplines shaping society's understandings of nature (Castree 2005). This review notes the landmark studies that underpin cultural geographers' understandings of *nature*. Braun and Castree (2001:1) note "for over a century, geographers have sought to describe and explain the society-nature interface." Extensive debates surrounding what Braun and Castree (2001) refer to as the 'society-nature problematic' highlight the complex and conflicting meanings of nature (Castree 2005) and, nature as the effect of power (Eden 2001). Two turning points in the culture-nature debate are identified - the social construction of nature that alleged the death of nature, and hybrid geographies that reminded geographers of the materiality of the world and the agency of non-human worlds.

### 2.4.1 Socially Constructed Nature(s)

The 'cultural turn' of recent decades marked a turning point in geographical thinking as it brought about "new theoretical perspectives on traditional disciplinary interests." (Gill 2006:5). A social constructivist approach emerged in contemporary social geography that positioned nature as 'inextricably social' (Braun and Castree 2001). Castree (2005) referred to this approach as 'de-naturalising' because it argues that what is declared as nature, or natural, is in fact a social construction. Hence, "nature is defined, delimited, and even physically reconstituted by different societies, often in order to serve specific, and usually dominant, social interests (Braun and Castree 2001:3).

Consequently, Castree (2004:191) declared 'nature is dead!'

Over the years a number of cultural geographers have made noteworthy contributions to the social constructivist argument (Bird 1987; Braun and Castree 1998; Demerit 1998; 2001; 2002; Fitzsimmons 1989; Haraway 1991; Harvey 1996; Katz 1998; Nesmith & Radcliffe 1997; Smith 1984; Willems-Braun 1997). For instance, Head (2000:49) contended that concepts such as nature " ... are seen not as pre-existing realities but as categories constructed by social processes. Their meanings are multiple and shifting." Equally, Macnaghten and Urry (1998:248) argued, "there is no single nature, only natures".

Some have argued that socially constructed nature is an effect of power (Eden, 2001). Braun and Castree (1998) pointed out, “the making of nature is always about much more than nature”, arguing that the construction and reconstruction of nature(s) “impinges on virtually all aspects of social reality” and therefore has wider implications for society (Braun & Castree, 1998:xii). Braun and Wainwright (2001) contended that nature is a source of power, stating that “ ... the very thing that is taken to be the object of environmental studies and politics – namely nature – is an effect of power.” (Braun & Wainwright, 2001:41).

One example of how the ‘power’ of particular social constructions, or versions of nature, play out through environmental politics is Cronon’s (1996) essay ‘The Trouble with Wilderness; or, Getting Back to the Wrong Nature’. Cronon (1996) explored the notion of wilderness, arguing that the very idea of wilderness is essentially a human creation reflecting cultural values at particular points throughout human history. Equally, Willems-Braun (1997) contended that constructions of ‘wilderness’ in British Columbia are embedded in colonialist epistemologies.

#### **2.4.2 Critiques of ‘Social Nature’**

The social construction of nature is not without critique. Cronon’s (1996) argument was contested and provoked debate among scientists and other scholars (Kearns 1998; Proctor 1998; Slaymaker and Spencer 1998). For instance, scientists and environmental geographers (Adams 1996; Callicot & Nelson 1998; Slaymaker & Spencer 1998; Snyder 1996; Soule & Lease 1995) perceived social constructivism as an attack on the value of scientific knowledge and argued that nature, regardless of how it is represented by society, exists as a ‘real phenomena’ and that representations of nature may be constructed but can be accurate if arrived at using appropriate procedures.

Other scholars have also noted the wider implications for society when nature is considered a socially constructed concept. For instance, Eden (2001) highlighted that perceiving nature as something that is socially constructed has implications for environmental protection. She questioned “ ... if we see nature as (merely) a cultural categorisation which is continually, diversely and mutually renegotiated

in its relationship with culture and not as something concrete under threat, then are 'environmental problems merely fictions wrought of constructions and do not require us to try to solve or prevent them?' (Eden 2001:82). Eden (2001) contended that rather than debating the idea that nature is a socially constructed concept, " ... conceptual research on what 'nature' and 'the environment' mean" and " ..practical research on how to manage them" need to be linked to effectively manage the environment.

### **2.4.3 A More-than-Human Geography**

Castree and Macmillan (2001:210) pointed out "though social constructionists *seem* to breach the social-natural divide which organises academic and lay thinking, they arguably go on to *reinstall it* at another level." Whatmore (2002) echoed this, arguing both social constructionist and natural realist accounts are premised on an 'a priori separation of nature and society'. Castree (2005:223) contended that " ... this dualism leads us to divide the world ontologically into halves. Even though these halves are connected, we tend to think of them as different."

A new generation of cultural geographers are attempting to 'think beyond' the nature-society dualism that has underpinned earlier geographical thinking (Bingham 2006; Murdoch 2006; Whatmore & Thorne 1998; Whatmore 1999; 2002). These geographers argued that " ... we have always lived in a mixed-up, hybrid and 'impure' world where it is difficult to disentangle things from their relationships." (Castree 2005:225), and called for a 'more-than-human approach to the world' (Whatmore 2006). This approach embraced the 'Actor-network Theory' and notions of 'hybridity' to trace multiple and heterogeneous networks involving various human and non-human actors, such as institutions, machines and animals (Castree & Macmillan 1998; Hinchcliffe 2007). Actor-network theories have been employed to investigate the relational agency of a number of non-human entities including animals, gardens and trees (Panelli 2010). Castree and Macmillan (1998) pointed out the major advantage of this approach to geographical thinking,

“ ... for actor-network theorists, they describe a world far richer than the society-nature dichotomy can allow because they stitch back together the socio-natural imbroglios that dichotomy has rent asunder.” (Castree and Macmillan, 1998:212).

As the title suggests, this ‘more-than-human’ approach attempted to integrate non-humans into the ‘fabric of society’ (Latour, in Whatmore 1999). Hence, this approach challenged the human-centred culture embraced by past geographical approaches in which the ‘stuff of the world’ is situated as mere ‘putty in our hands’ (Whatmore 2006). Plumwood (2009:116) argued that the ‘human-centered’ conceptual framework underpinning human-nature relationships in modern society resulted in “ ... a failure to understand our embeddedness in and dependency on nature ...” and “ ... distorts our perceptions and enframings in ways that make us insensitive to limits, dependencies and interconnections of the non-human kind.” Moreover, she argues that ‘human-centredness’ is dangerous and irrational because it “..damages our ability to see ourselves as part of ecosystems and understand how nature supports our lives.” (Plumwood, 2009:117)

Hence, this approach radically reconfigured geographical thinking, encouraging geographers to think relationally employing notions of ‘networks’ and ‘hybrids’ rather than ‘pure’ entities and ‘interactions’ (Braun and Castree 1998), in turn, allowing the discipline of geography to embrace the entanglements between human and non-human entities and the messiness and interconnectivity of life.

#### **2.4.4 Recent Explorations of Nature**

Castree (2004:191) contended that ideas of nature continue to have ‘powerful worldly effects’ and called for “ ... close analysis of nature-talk in any and all realms of society”. This call has been answered by recent work in geography that explores the notion of nature through a number of strands (Panelli 2010). One strand of literature examines how people engage with and experience nature, considering human relationships with non-humans and natural environments (Besio *et al.* 2008; Gill *et al.* 2009; Head & Muir 2007; Little & Panelli 2007; Longhurst 2006; Nagle 2010; Waitt 2008; Waitt *et al.* 2009).

Another strand of literature draws on hybrid geographies, in particular the actor-network theory and notions of performativity, to investigate the relational agency of the non-human actors such as gardens (Hitchings 2003; Power 2005), trees (Cloke and Jones 2004; Cloke and Pawson 2008) and animals (Fox 2006).

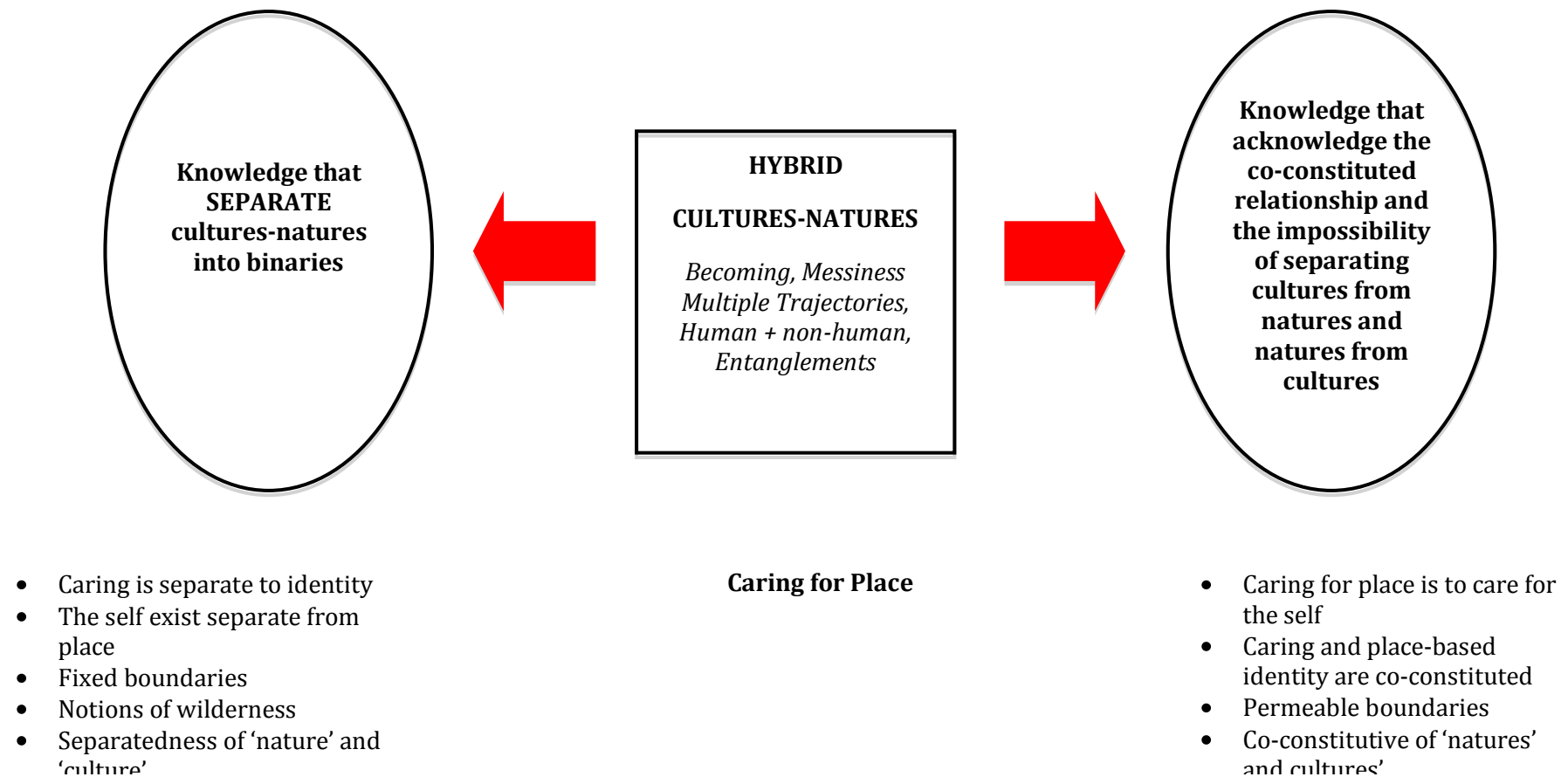


Figure 2.1: Beginning with a hybrid understanding of nature enables a conceptual framework that seeks to identify different types of knowledge that operate to bound 'nature' and 'culture' as separate entities, or illustrate the impossibility of separating 'culture' and 'nature' on Lord Howe Island.

## **2.5 Conclusion**

The aim of this chapter was to situate the research by reviewing three fields of literature. World Heritage is a dynamic and developing concept that has a 40-year history of change and debate. This process has been influenced by academic debates of culture and nature and the increasing political voice of non-Western people (Head 2000). These developing notions of World Heritage have implications for the identification, management and protection of World Heritage properties. Concepts from the geographical literature of 'cultures of natures' are helpful in examining notions of islandness and World Heritage and the how they operate to bound World Heritage islands such as Lord Howe Island. In light of these discussions, the next chapter will explore methodological implications for doing island research.

## Chapter Three: Methodology



**Kentia, built in 1905 and still occupied by the same family. This is where the researcher stayed on the Island**

### 3.1 Introduction

The chapter discusses the methodology of the project. As Baldacchino (2008) points out, there are various ‘methodological’ and ‘epistemological’ challenges associated with the study of islands and island communities. For example, Yi Fu Tuan (1974) underscores normative understandings in Western cultures of tropical islands as paradise, which has implications for island studies. Equally, Baldacchino (2008) highlights how in social science projects islanders often become the ‘object of the gaze’, preventing islanders from “... the possibility of defining themselves and of articulating their own concerns and interests.” (Baldacchino, 2008:39). Alert to these warnings, the methodological approach employed in this project did not follow a prescriptive procedure; instead it was one of subtlety and nuance and required a constant process of critical reflexivity and negotiation. The Island community did not always embrace methodologies carried out in the field. The researcher responded to this by adjusting and readjusting the methodology of the project accordingly. An Islander descendant



facilitated this methodological process by teaching the researcher various cultural protocols and facilitating interview recruitment. With the help of this Islander, the researcher remained sensitive to the research context as methods were carried out in the field.

The aim of this chapter is to provide a comprehensive description of methodologies that assure rigour (see Appendix 9.1). The chapter is divided into four sections. First, ethics is addressed at two levels: the formal ethics of the National Guidelines and, at a personal level, through the process of critical reflexivity. Second, the research approval process of the Lord Howe Island Board is outlined. Third, the mixed method approach combining survey, semi-structured interviews and a reflexive research diary is discussed. Fourth, positionality is discussed. And finally, the limitations are outlined.

## 3.2 Ethics

*Ethics deals with values, with good and bad, with right and wrong. We cannot avoid involvement with ethics, for what we do - and what we do not do - is always a possible subject of ethical evaluation. Anyone who thinks about what he or she ought to do is, consciously or unconsciously involved in ethics.* (Peter Singer, 1993:v)

Peter Singer's words are a reminder that ethics are evident in all aspects of everyday life. He also makes the point about how ethics are implicated through practices that involve a person thinking about what they are doing. Designing a research project is therefore implicitly ethical because it demands asking questions not only about *why* a research project should be conducted but also, *how*. Negotiating ethics is therefore fundamental to the research process.

The importance of ethics in conducting research is echoed by a number of geographers. For example, Cloke *et al.* (1999:132) stated: "In all aspects of... research we have found ourselves involved with issues and arguments about the ethics of researching the 'other'". For Dowling (2005), ethical questions arise when research is conceived as a dynamic social process that involves unequal power relationships. Ethical questions arise because of the personal interactions between the researcher and those being researched which rely upon human

relationships, engagement and attachment (England, 1994). Hence, engaging ethically in the field involves negotiating a web of social relationships and power structures (Hay, 1998 (b)). Consequently, ethics are interleaved with all aspects of research and ethical practice is integral to conducting research. Ethics in this project are addressed at two levels: the formal ethics of the National Guidelines and, at a personal level, through the process of critical reflexivity.

### **3.2.1 The Formal Ethics of the National Guidelines**

Formal ethics required submitting an application to the Human Research Ethics Committee, University of Wollongong. The guidelines required addressing questions that focus on the researcher justifying why the research is being conducted, who is going to be involved, and what people are being asked to do. The formal procedure focused attention on whether the individual and collective benefits of the research outweigh the risks. Completing the ethics application form requires carefully consideration about what constitutes ethical practice and how these are to be incorporated through the research design. The key ethical considerations in designing this research for participants were informed consent, confidentiality and minimising harm.

#### ***Informed Consent***

Informed consent involved ensuring that an individual is sufficiently informed about the project, and understands what participation entails (Dowling, 2005). A 'Participant Information Sheet' (Appendix 9.2.3) was designed in order to ensure that these requirements were met. The 'Participant Information Sheet' detailed the aims and objectives of the project and outlined participant involvement. A 'Participant Information Sheet' was mailed with the survey and given to individuals willing to participate in a conversation style interview.

#### ***Confidentiality***

Confidentiality involves respecting a participants' privacy by ensuring that private details about individuals disclosed in interviews or through other qualitative methods are not released into the public domain (Dowling 2005). A

'Consent Form' (Appendix 9.2.4) was employed to address confidentiality. Participants were asked to complete a consent form prior to being interviewed. The 'Consent Form' allowed the participant to give their consent to partake in a conversation style interview and to have the interview audio-taped. In addition, the 'Consent Form' also allowed the participant to choose to receive a transcript of the interview for revision. In regard to confidentiality, two options were provided:

- to be directly quoted in the publication using a pseudonym or a given name, or
- for the information provided to remain confidential.

Approval from the Human Research Ethics Committee at the University of Wollongong was received before commencing research on 31 March 2011; ethics number: HE11/109 (see Appendix 9.2.2).

### **3.2.2 Negotiating Ethics in the Field**

Rigid sets of ethical codes and guidelines do not always address the "variability and unpredictability of geographic research" (Dowling, 2005:22). Cloke *et al* (1999:136) stated, "it is rarely possible to take all of the ethical decisions relating to research before it begins, as ethical issues ... are shaped contextually, and therefore need to be addressed in a situated manner." Hence, Hay (1998 (a)) and Cloke *et al* (1999) argued that ethical practice should be flexible. Hay (1998) suggested that this could be achieved through a series of "flexible prompts for moral contemplation" that encourage geographers to contemplate ethics in an informed manner.

The ethics of conducting research on an island proved challenging for three reasons. Firstly, the permanent residential Island community was relatively small, consisting of approximately 350 people. The PIS noted that participants' responses might be identifiable to other Islanders even with the use of a pseudonym because of the small residential population. Secondly, some of the issues surrounding the project were extremely controversial and emotionally charged, such as the proposed rat eradication program. Thirdly, negotiating informed consent proved challenging because of the technical jargon of ethics.

Consequently, negotiating the ethical issue of confidentiality was problematic (see Box 3.1).

**Box 3.1: Negotiating Ethics in the Field: A complex, messy and personal task**

Lord Howe Island has a small residential population of approximately 350 people. Thus, interviewees must remain mindful throughout the interview that their responses may be identifiable to other residents even with the use of a pseudonym. The Participant Information Sheet clearly stated this to interview participants.

In some situations, 'Consent Forms' were omitted from the research process. The reason for this was that in the early stages of interviewing it became apparent that some participants did not understand the language of the consent forms used to convey ethical issues including "confidentiality", "... to be directly quoted in text" and "pseudonym". These participants were clearly able to read the 'Consent Form', the ethical dilemma was whether they actually understood what they were consenting to due to the technical jargon of ethics.

After completing my first interview with an elderly participant, I explained the options for confidentiality on the 'Consent Form'. She clearly read both options aloud, but asked her granddaughter (who was approximately twelve years of age) which option to choose. The implications of the options appeared meaningless to both the respondent and her granddaughter. After spending some time explaining the consequence of choosing a particular option, I convinced the participant that it was probably best to choose to remain confidential. I did this as a precautionary measure to protect a participant, who in my view, did not understand the wider implications of sharing her ideas.

An alternative means had to be implemented to convey the consequences of consenting. Employing my personal moral judgment, I decided that the correct ethical response to this dilemma was to omit the 'Consent Form' when interviewing participants who did not provide a sense that they understood the wider implications of sharing their ideas. Hence, it was decided that these participant's responses would not be quoted directly in the text. Instead, their ideas would be presented in a non-identifiable way.

This decision was made to minimize the potential for harm to participants who did not understand the consequences of choosing to be directly quoted in text with their given name or a pseudonym. I felt it was my responsibility as a researcher to make this moral judgment, even though it did not follow the formal procedure of the National Guidelines.

### **3.3 Island Governance**

Before commencing, the project also had to be approved by the Lord Howe Island Board and granted a 'Lord Howe Island Board Research Permit' (Appendix 9.3.3). To be issued a permit required completing a research application form (Appendix 9.3.2), detailing the project title, objectives, methodological design, type of research (qualitative or quantitative) and the research timeframe. Interestingly, the questions on the permit form assumed that *all* researchers on Lord Howe Island would be adopting a scientific method and be focussed on the non-human world (see Appendix 9.3.3). Communications with the Lord Howe Island Board occurred via the Lord Howe Island Board Ranger (see Appendix 9.3.1). Part of the Lord Howe Island Board Ranger's role is to liaise with researchers seeking to work on the Island. The Lord Howe Island Board Ranger positioned himself as a gatekeeper representing the Lord Howe Island Board; controlling who comes in, and the type of research carried out on the Island.

### **3.4 Mixed-Methods Approach**

The project employed a mixed-methods approach: a household survey, semi-structured interviews and a reflexive research diary. Baxter and Eyles (1997) point out that the use of multiple methods enables triangulation, which is a strategy employed to ensure the credibility of research findings. In addition, a mixed method approach was appropriate to the research context. As discussed above, there are a number of inherent island characteristics that should be considered when conducting research on an island. It was important to be both reflexive and flexible with the methodology, that is, if one approach did not work on the Island, readjust the methodology accordingly or try another.

The research was conducted in two stages during the early months of 2011. The timing of the project was important. Seasonality means that many Islanders leave the Island in late May for a holiday at the end of the Lord Howe Island tourist season. The first stage involved visiting the Island to distribute the survey in April (1 week visit). The second stage was conducted in the May (3 week visit). Semi-structured interviews were conducted with temporary or permanent Island residents including people who identified as either Islanders or non-

Islanders, including non-Islanders that were employed as environmental managers. Reflexive diary entries were written regularly throughout the research project.

### 3.4.1 Survey

McLafferty (2003) contended that surveys have long been accepted as an important research method in geography. Surveys are employed to explore “people’s perceptions, attitudes, experiences, behaviours and spatial interactions in diverse place contexts.” (McLafferty, 2003:88). McGuirk and O’Neil 2005 (148) echo this, stating that surveys are useful for “..gathering original data about people, their behaviour and social interactions, attitudes and opinions, and awareness of events.” Surveys represent an especially ‘powerful’ information-gathering technique when employed in mixed method research because they combine effectively with other more intense qualitative research methods such as, in-depth interviews (McGuirk and O’Neil, 2005:147).

A postal survey was employed in this project to gather data about temporary and permanent Island residents’ attitudes, beliefs and opinions in relation to the World Heritage Designation on Lord Howe Island.

The aim of the survey was threefold. First, the survey was designed to explore the diversity of residents’ place-based connections to the Island. Three open-ended questions were asked. The intention of the questions were to explore what Island places are meaningful to participants, why these Island places are meaningful to participants and what, if anything, threatens these meaningful Island places. The purpose of the final question was to explore how World Heritage listing is understood by Lord Howe Island residents. Second, the survey was designed to locate which places on the Island were important in making sense of their life. A map was employed to encourage participants to identify places that are meaningful to residents and issues of concern surrounding these places. Third, the survey invited residents to participate in a follow-up semi-structured interview. The aim of this recruitment approach was to invite *all* permanent and temporary Island residents to participate in the project, including Islanders (original descendants; those who have married in; those who have gained Islander status by residing continuously on the Island for ten years; and those with Ministerial designation), tourism workers, environmental managers and other regulatory staff such as, police.



The survey went through a number of revisions. Attention was given to the wording of questions, selection of map, and layout. The survey was piloted with two temporary Lord Howe Island residents. The result of their feedback revealed that an important landmark (Cobby's Corner) appeared to be in the wrong place on the map. In addition, one individual expressed that he had difficulties circling particular meaningful places on the map because he felt the entire Island was meaningful, and valued the place equally, as one entity.

The final survey was designed to fit on one-page double-sided A3 page and folded into an A4 booklet (see Appendix 9.5). The survey comprised a brief introduction to the project including information on what participating in the project involves, followed by three basic open-ended questions and an A4 map of Lord Howe Island (see Appendix 9.5.3). Four hundred surveys were printed in colour and distributed to all Island households via the Lord Howe Island Post Office. Each household received two copies of the survey.

### **3.4.2 Significance of the Survey Response Rate**

The survey played an important role in shaping the methodological approach to the project because the low response rate revealed that the intended research method was not suitable in terms of the research context.

The survey response rate was very low, at 2.75 per cent. Acceptable response rates range between 30 – 70 per cent (Hikmet and Chen 2003). Explanations for the low response rate are perhaps fourfold. First, the survey may have been unwelcome, interpreted as another form of government intrusion. For many Islanders there is a strong sense that Lord Howe Island is over-regulated by bureaucratic processes and restrictions. Island residents are regularly inundated with household surveys relating to various issues on the Island for example, wastewater strategies. Hence, the survey may have been regarded as another expression of bureaucracy from the mainland that reinforces Island resident's anguish at being an over-researched community from afar. Second, the survey may not have encompassed the preferred form of communication amongst many living on the Island. Many Islanders seem to prefer face-to-face communication as opposed to written forms of communication, such as, emailing and household

surveys. Third, a survey exploring specific places of importance to Islanders may have been interpreted as a way of discrediting connections to the whole island. Indeed, a common theme from returned surveys was the claim that the entire Lord Howe Island and offshore islands were important in sustaining their sense of self and confirming their Island identity. Finally, the map (created by the Lord Howe Island Board in 1992) while depicting Lord Howe Island, Blackburn Island, Gower Island and most reefs and passages, did not depict the Admiralty Islands, Soldiers Cap, Mutton Bird Island, Sail Rock or Ball's Pyramid (see Appendix 9.5.3). Hence, the survey map may have proved problematic for respondents to whom these places are meaningful. The survey map was already entangled into particular politics and cultural perspective. Overall, the survey may therefore have illustrated to some Islanders that 'mainland researchers' do not know or understand 'the Island' or Island way-of-life.

	<b>Number of Surveys distributed</b>	<b>Number of Surveys Returned</b>	<b>Number of Respondents for interviews</b>	<b>Number of actual interviews conducted</b>
<b>During First Trip</b>	400 (2 per household)	11	11	8
<b>Prior to Second Trip</b>		7	4	2
<b>During Second Trip</b>		4	4	4
<b>After Second Trip</b>		1	0	0
<b>Totals</b>	400	23	19	14

Table 3.1: Survey response rate and the interviews resulting from survey recruitment.

### **3.4.3 Semi-structured interviews: Working face-to-face**

Semi-structured interviews are appropriate for this project because they enable participants to provide insights to how they make sense of their lives on Lord Howe Island and the sets of ideas that inform how and why they care for the Island. Valentine (2003) describes interviews as a fluid, conversational dialogue. Interviews involve a 'face-to-face verbal interchange' between the researcher and the researchee (Dunn 2005). Hence, unlike questionnaires or surveys, they allow respondents to "construct their own accounts of their experiences by describing and explaining their lives in their own words" (Valentine 2003:111). Valentine (2003:111) points out the advantages of interviews as a research method stating:

An interview is not to be representative ... but to understand how individual people experience and make sense of their own lives. The emphasis is on considering the meanings people attribute to their lives and the processes, which operate in particular social contexts. The fluid and individual nature of conversational-style interviews means that they can never be replicated only corroborated by similar studies or complementary techniques.

Table 3.1 illustrates that prior to the second trip to the Island (upon which interviews were scheduled) 18 surveys were returned and from these surveys 10 interviews were conducted. The majority of these interview participants were over 50 years of age and Islanders (descendants of the early settlers). Hence, this respondent group was not inclusive of the social diversity present among those who claim an Islander status. In addition, none of the survey respondents were employed as environmental managers. Only one of the Lord Howe Island Board employees working within the environmental management section responded to the survey. Rather than being inclusive of all residents, interview recruitment targeted two residential groups that could be categorised as 'environmental managers' and 'Islanders'.

To facilitate participant recruitment for interviews of people involved in the environmental management decision-making and increase the number and diversity of Islander respondents, the project relied upon the help of an Islander.

By chance, the researcher stayed with Francis during the second trip to the Island. Francis is a fifth generation Lord Howe Islander who has spent the major part of her life living on the Island. Francis is fascinated by the stories of the early settlers and the cultural heritage of the Island, which she has researched extensively; hence, she took a keen interest in the project.

Francis's knowledge of the Island and the cultural protocol of the Islanders were crucial to facilitating the circulation of invitations by word of mouth through a number of social networks. Her knowledge of the social diversity of residents on the Island meant that she was able to circulate invitations in the culturally appropriate manner to Islanders differentiated by:

- occupation, such as, fishers, teachers, tourism operators and environmental managers;
- Islander status, such as, Islander descendants, Islanders by law and non-Islanders;
- gender;
- age;
- time spent on the Island, such as, Islanders who had lived away from the Island for the middle years of their life and returned to retire, others who had lived on the Island for their entire life.

Although snowballing aided in the recruitment process, Francis played a critical role in recruiting interviewees through a culturally informed process of facilitation.

Respondent Categories	Recruitment Approach			<u>Total</u>
	Survey	Targeted	Recruited through Facilitation and Snowballing	
<b>Environmental Managers</b>	1	7	0	8
<b>Islanders</b>	9	0	27	36
<b>Non-Islanders</b>	0	0	7	7
<b><u>Total</u></b>	10	6	34	51

Table 3.2: Approaches to interview recruitment in terms of the different types of Island residents recruited

Staying with an Islander allowed the researcher to become accustomed to various cultural protocols, which had implications for the research findings. Francis transferred Island knowledge about cultural protocols to the researcher. She taught the researcher a number of cultural protocols that should be followed in order to create good relationships with Island residents and facilitate Islanders to share their knowledge (see Box 3.2). For instance, most Islanders prefer to communicate face-to-face; others prefer speaking to people in a group situation over lunch or a cup of tea. In doing so, Francis revealed that there is a culturally appropriate way to carry out research on the Island rather than setting up a ‘formal interview time’.

Aware of these cultural protocols, the research and the research project were repositioned by the Island community. The project appeared no longer to be envisaged as a bureaucratic instrument imposed from the mainland but as a project which might give a voice to Islanders. Some Islanders approached the researcher to participate in interviews, expressing their concerns about the Island. Rather than researcher recruiting participants, these Islanders recruited the researcher to tell their story.

In total, 51 semi-structured interviews were conducted. Apart from one interview that took place on the mainland and one phone interview, all interviews were held on Lord Howe Island during both the preliminary and

secondary visit to the Island. Interviewees decided on comfortable and familiar locations for interviews such as homes or work places, public places such as the museum or on the grass overlooking the lagoon, some interviewees felt comfortable to be interviewed at the researcher's accommodation on the Island, including Francis's house and Kentia. Interviews averaged approximately 30 minutes in duration and a total of 45 interviews were transcribed and recorded. Some interviews were informal and therefore not recorded. These interviews occurred over lunch at the museum or dinner at Francis's house and at the Island's Co-op. It was not always suitable to bring a recorder along. Pseudonyms are used in subsequent chapters so as not to identify interview participants.

### **Box 3.2: Learning to become culturally responsive**

Living with an Islander allowed me to experience first hand everyday life on the Island and learn a number of Island protocols that shaped the way I carried out research on the Island. Francis arranged a number of group chats that involved speaking with Islanders in relaxed and comfortable settings - over lunch at the museum, an evening out at an Islander's house or during a morning tea break at her workplace. This approach was informal and noticeably different to a one-on-one interview where the interviewer and interviewee have to work at developing a rapport. It was clear that some Islanders preferred to talk to the researcher in a casual, group setting and would not have participated in a recorded one-on-one interview.

These informal chats brought a number of issues to my attention, which I sought to be sensitive towards. I learnt that a number of Islanders felt threatened by researchers and formal research processes. Moreover, previous research on the Island mainly focused on flora and fauna and the natural attributes rather than the cultural heritage of the Island (the Islander's story). It seemed that Islanders were not accustomed to being the focus of the researcher's attention or being asked their views and opinions in relation to Island life.

Whilst carrying out research on the Island, I became aware that Islanders preferred face-to-face communication as opposed to other written forms of communication. This was in part indicated by the low survey response rate in contrast to the overwhelming response to interviews. From Francis and others I learnt about the significance of islandness in shaping the Island way of life and identity. Living in an isolated, small and bounded community has shaped how Islanders interact with one another. I learnt that maintaining a friendly manner by waving to others when out and about is an important part of everyday Island life and is especially important if you are an outsider because it indicates that you are open and happy to chat.

### **3.4.4 Reflexive Research Diary**

Critical reflexivity is described by Dowling (2005) as "... a process of constant, self-conscious, scrutiny of the self as a researcher and of the research process". England (1994:81) points out:

The openness and culturally constructed nature of the social world, peppered with contradictions and complexities, needs to be embraced not dismissed. This means that "the field" is constantly changing and that

researchers may find that they have to manoeuvre around unexpected circumstances.

England's words remind us that critical reflexivity should be embraced as a means for engaging with the many complexities of conducting qualitative research in the field. Hence, critical reflexivity can be employed as a strategy for situating ethical issues in the study context.

Self-critical reflexivity was employed in this project through the use of a reflexive research diary. Diary entries were regularly written throughout the research project. Major threads included: logistical problems; changing positionality in the project (see Box 3.4); the role of an Islander descendent in the project; learning cultural protocols (see Box 3.2); uneven power relationships; and reflections on interviews and methodology.

### **3.4.5 Positionality**

.. the researcher is an instrument in his/her research and despite some commonalities (our education and in many instances our "race" and class), geographers are not part of some universal monolith. We are differently positioned subjects with different biographies, we are not dematerialised, disembodied entities. (England, 1994: 84-85)

England's words remind us of the importance of thinking reflexively about positionality. Box 3.3 outlines how the researcher's background and personal attributes were significant in shaping the research project. The researcher's positionality on the Island changed over time and in different social contexts. Equally, the project shaped the researcher, as she learnt Island protocol and how to engage in a meaningful way with Islanders.



**Box 3.3: Why this Project?**

My family's connection to a Lord Howe Islander and a previous visit to the Island greatly influenced my decision to do an honours project based on Lord Howe Island. Because of this family connection, I visited the Island for a family holiday in 2005. I felt that our experience of the Island was different to other tourists because we were able to stay in an Island home and the fact that we were friends with an Islander meant that we shared a commonality with other Islanders who were friendly and helpful.

Since this first visit, I have had a strong interest in Lord Howe Island. Discussions about Island politics, environmental and social issues with a Lord Howe Islander revealed that there was some discontent among Islanders in relation to the way the Island was being managed. These discussions continued as I designed my project and were very useful in developing the research topic and at various stages throughout the research process, such as, project design, establishing research methods, participant recruitment techniques, negotiating accommodation on the Island and being somewhat prepared for what to expect upon arrival to the Island. Moreover, being connected to a family of Lord Howe Island descent meant that I was never completely situated as an outside, objective researcher in this project.

### **Box 3.4: Positionality**

A number of personal attributes influenced the way in which I, as the researcher shaped the project including gender, age, education, surfing interests and my connection to a Lord Howe Islander. Equally, this project shaped both myself and my approach to doing island research as I became aware of Island protocol and *islandness*.

#### **First Trip**

The first trip I made to the Island lasted one week. I stayed with my parents in our Islander friend's family home. Prior to arriving on the Island, I was concerned about staying in an Island home rather than in tourist accommodation because I felt that it might position me as a biased researcher in the eyes of the Island residents who would instantly be aware of my connection to this Islander and her family. However, my connection to an Islander and staying in an Island home aided me greatly in making connections with Island residents, especially Islander descendents who share strong connections to one another.

During this trip I became increasingly aware that some Island residents seemed wary and suspicious of me because I was a researcher. However during my second trip, after interviewing and talking to a number of Island residents I came to understand that many Islanders felt threatened by researchers, especially by those that were outsiders or 'ten second experts'. One Islander gave me the impression that she did not appreciate researchers digging about 'her backyard' to find something small but significant because she was concerned that this would further restrict Islander activities and local practices. Being a researcher certainly emphasised my positioning on the Island as an outsider and I felt this quite strongly at times.

#### **Second Trip**

During this visit to the Island I stayed with an Islander descendent, Francis, who is also the author of a comprehensive history of the Island. Staying with Francis allowed me to experience first hand everyday Island life and to learn Island protocol. We often talked about the human history of the Island and how historic events have shaped the Island and the Island way of life. From these chats I learnt about the feelings of Islanders towards outsiders and researchers.

Staying with Francis during my second trip to the Island greatly affected my positionality in the research project. Word had got out! And to my surprise most Island residents knew I was staying at Francis's without me having to tell them. Francis had arranged for me to talk to a number of Islanders before I arrived and was often introducing me to Island residents over dinner or at the Bowling Club. As a member of the local community, Francis was integral to facilitating interview recruitment. During this trip, I got to meet with and talk to a lot more residents than I did on my first trip to the Island.

I have been surfing for a number of years now and on my second trip to the Island, I arrived on the Island without a surfboard! Through an interview with an Islander who also surfs, I was offered a surfboard until mine arrived. Surfing at Blinkies in the late afternoon meant that I got to meet and form friendships with a crowd of young surfers, some of them Islanders and some of them hospitality workers. As a new face in the water, a young person and one of the only female surfers, I was often quizzed about what I was doing on the Island. A week after my arrival, I was accompanied by my partner Matt who is an avid surfer, kite-surfer and photographer. Because of these interests, I formed a connection to not only the surfing community, but the kite-surfing community. This connection led to an invitation to dinner with an Islander kite-surfer who works as Mount Gower walking guide and owns a fishing charter.

Whilst researching on the Island I was approached by a resident who was interested in doing an interview but wanted to know if I had any connection to the Lord Howe Island Board before he would participate. The fact that I had no connection to the Lord Howe Island Board other than a research permit was beneficial in terms of being accepted by the Island community and being situated as less of a threat.

### **3.5 Limitations**

There are a number of factors that constrained the methodology employed in this project. Lord Howe Island is a distant and expensive destination. Airfare costs and time travel had to be negotiated in terms of the honours research timeframe as well as the tourist season on the Island, which determines residents' movements on and off the Island. These timing, cost and logistical factors restricted the research period and therefore, the amount of time the researcher was able to spend on the Island. Moreover, limited email access on the Island hindered the researchers ability to organise interviews prior to arriving on the Island and the ability to keep in contact with those residents keen to participate in the project in between visits. Furthermore, it is clear that Island residents prefer face-to-face contact as opposed to other written forms of communication.

Acknowledgment of and adherence to Island protocols throughout the methodology was advantageous in terms of interview recruitment, forming relationships and developing a rapport with Island residents. However, this may

have influenced environmental managers' responses, who are constrained by the conditions of their employment in what they can say.

### **3.6 Conclusion**

The aim of this chapter was to provide a comprehensive description of methodologies employed in this project. Although the methodology employed a systematic approach, it was sensitive and subtle because it involved learning and acknowledging Island protocol. In order to adhere to Island protocol, this methodology involved a constant process of adjustment and critical reflexivity. The flexible structure of the mixed method approach and help from an Islander descendent were crucial to producing qualitative meaningful results. To begin with, Island residents were closed to participating in the research project. This is reflected in the low survey response rate. However, the methodology involved listening to different ways of knowing, which facilitated understanding of cultural processes of engagement. This resulted in an openness in Island residents' responses to the research project overall. The next three Chapters (four, five and six) discuss results generated by the project.

## Chapter Four: Caring for Lord Howe Island



Model of the Island at Lord Howe Island Central School

### 4.1 Introduction

This chapter draws on a discourse analysis to explore participants talk about caring for Lord Howe Island. The chapter begins by outlining the social hierarchies of the Island. Next an interpretation is given of how Island residents talk about caring intersects with *islandness* and the process of boundary making. This interpretation is divided into two sections according to residents' capacity to make management decisions – the relatively disempowered Island residents and the relatively empowered environmental managers. The term environmental manager refers to those involved in the environmental management of Lord Howe Island. The aim of this interpretation is to determine how the intersection of discourses of islandness (Baldacchino 2006, Hay 2006, Jackson 2006, Stratford 2008) boundaries and nature inform different practices of caring (Gill 2010).

## **4.2 Social hierarchies: *becoming an islander; and becoming an environmental manager***

Small population numbers, continuous settlement and proximity meant participants expressed a heightened awareness of the multiple social hierarchies that exist among residents on the Island. This social hierarchy positions Island residents in terms of their authority to speak for the Island. Social tensions exist between those Islanders who trace descent to the early settlers, Islander by laws, those who are married to Islanders and non-Islanders. Island residents who are not Islander descendants are very aware they lack the authority to speak for the interests of the Island. Interviewees used a number of derogatory vernacular terms that reproduced the social hierarchy including, *'blow-ins'*, *'imports'*, *'ten pound poms'* and *'outsiders'*. These terms emphasise these people are not of Lord Howe Island. Islander descendants' authority and identity draw upon the number of generations their family has lived on the Island.

A different social hierarchy that is particularly significant to this project is how environmental managers and other Island residents are positioned. Those in environmental management positions have the authority to make decisions about how best to care for the Island. In comparison much of the remaining residential population including Islander descendants, who are not employed in environmental management positions, do not have this authority.

Island residents are differently positioned in terms of their capacity to make decisions concerning environmental management, which in turns affects their ability to care for the Island. Interviews showed that some Island residents resent environmental managers' capacity to make decisions in terms of caring for the Island. Interviewees described those that manage the Island as *'a very secretive little organisation'* that are not *'consistent'* in their approach to caring for the Island and hold too much authority and power:

*I've been told that no other council has got the authority that they've got. I think that authority should be taken from them and be more in line with mainland councils ... to the point where they can't just say we're going to do something without the people at least agreeing to it...*

James (Islander descendant, male, 60s, Guest House Lounge, semi-structured interview, April 2011).

This interviewee highlights social hierarchies that exist between environmental managers and Island residents. For him, those in charge of managing the Island operate to disenfranchise other residents.

Moreover, some interviewees felt that environmental managers undervalue Island knowledge and Island cultural protocol:

*They don't have an actual appreciation for the understanding of the Island people basically, in my view, because they're here for two minutes. They work on assumptions and they don't actually want to get to know the people as a community. They're basically in and out. they use it as a stepping stone for their own career on the Island and the locals get left with the long term repercussions of those sorts of things...*

Peter (Islander descendant, male, 30s, interviewee's business premises, semi-structured interview, May 2011).

For this interviewee, environmental managers are positioned as transient, and therefore unable to appreciate Islanders or their way-of-life.

Environmental managers are positioned as 'career-driven', perhaps implying their impetus for caring is self-interest rather than Island-interest. The interviewee describes environmental managers' scientific knowledge of caring as based on '*assumptions*', implying they lack the everyday practical knowledge of how to care for the Island.

### 4.3 Discourses of *Islandness*

Following Jackson (2008), the notion of *islandness* broadly refers to qualities of islands - social, geographical or political - that are distinguishable from those of continents. Islands share a number of inherent characteristics such as separateness, boundedness, isolation, vulnerability and smallness (Bade, 2010). On Lord Howe Island, like other islands, these inherent characteristics help to constitute Island life and shape Islander identities that value tolerance, cooperation and self-reliance. Though the Island community is often divided over various issues that arise on the Island, residents exemplify a strong sense of collective community when faced with perceived external threats to their island-way-of-life. Thus Jan, comments:

*When push does come to shove all those factions will stick together like you know what to a blanket if they ... have to. For example, in the winter months when the weather gets really wild and someone's boat blows over and threatens to sink - even though you'll see through the summer months those people very competitive against each other - if someone's boat tips over, every human being available will help to upright the boat and not see it sink ... so if push comes to shove, this community as a whole, whether they be born and bred, or blow-ins like, us will stick together for their community.*

Jan (Islander by law, female, 50s, interviewee's home, semi-structured interview over a cup of tea, May 2011).

This interviewee is very aware of social hierarchies that operate on the Island to position residents as either 'born and bred' or 'blow-ins'. She emphasises that although these social divides exist among residents, in times of need, residents support one another.

When asked what made Lord Howe Island different from the mainland, interviewees commented that most residents are called by their nickname and that waving to people as you pass is commonplace and part of the '*friendly nature of the Island*'. Hence, Peter said:



*When you're driving around you always wave to people. You put your hand up and you wave ... that's part of the friendly nature of the Island ... whereas if you're on the mainland you might walk past someone and you don't care - they go home that night. Whereas on the Island here you have to live with them; you have to see them socially; you have to mix with them. I think it's very important to have an open friendly manner about yourself whilst you're here.*

Peter (Islander descendant, male, 30s, interviewee's business premises, semi-structured interview, May 2011).

This interviewee makes a clear distinction between the mainland and the Island in terms of how small numbers of people change how he understands interpersonal relations. He explains that maintaining a 'friendly manner' is an essential skill when small numbers of people are living in close proximity to one another.

Interviewees also talked about a tolerance that exists on the Island. A tolerance that is attributed to smallness and the spatially bounded qualities of island living. Hence, descriptions of tolerance referred to the temporal dimensions of island-way-of-life, particularly the slow pace and waiting patiently for mainland products shipped to the Island:

*One thing that is probably more unique than anything is that most people here are extremely tolerant, as in we tolerate so much more than what they tolerate on the mainland. Tolerance on the mainland is a thing of the past: nobody tolerates anything. Like traffic, for example, no one tolerates the person who didn't take off from the traffic lights instantly; no one tolerates anyone stepping in their way on the footpath ... you have to be prepared to be way more tolerant than you would on the mainland ... because everything you do here you wait for it: like you order something; you wait for it; you wait for the boat to come; you wait for everything.*

Jan (Islander by law, female, 50s, interviewee's home, semi-structured interview over a cup of tea, May 2011).

This interviewee understands tolerance as an attribute of everyday island life that is tied to inherent physical island characteristics such as remoteness and isolation.

The notion of tolerance plays out in terms of the way in which Island residents and environmental managers negotiate how they are differently positioned in decision-making processes:

*Island people have ... developed that skill or mechanism that, "I may not necessarily like you, or agree with you, but we can get along - we can be civil and friendly even" ... and I think most people deal that way. And that being said, I've found the vast majority of people - they may not like the decision, but if its fair and they understand why, they move on...*

Chief Executive Officer, Lord Howe Island Board (interviewee's office, semi-structured interview, May 2011).

This interviewee understands how smallness and proximity operate in ways that means decision-making on the Island is felt more on a personal level. He recognises Island people's unique skills that enable them to not take each policy decision personally.

#### **4.4 Island residents talk of islandness, boundaries and caring for the Island**

Discourses of *islandness* inform Lord Howe Island residents' knowledge of caring for the Island. For Island residents, caring for the Island cannot be separated from the discourses of pride, birthright, family heritage, stewardship, home, beauty, traditions, vulnerability and remoteness as well as the language of ecosystems and species. While Lord Howe Island residents draw upon different understandings of *islandness* that facilitate different knowledge in relation to *how* to care for the Island and *what* to care about, all Island residents bound the whole Island as an important place that needs to be protected. Interviewees describe the Island as an incredibly meaningful place - '*a special place*', '*a very small and very fragile place*', which they show '*love*' and '*respect*' towards. Interview participants were given a map of Lord Howe Island and asked if there

were any places on the Island that were particularly meaningful to them. Most interviewees responded to this question by stating that the entire Island was meaningful. Examples of responses include answers such as, *'the whole lot'*, *'everywhere'*, *'the whole place'*, *'the Island as a whole'*. This meaningful relationship bounds not only Lord Howe Island as an important place, but the entire World Heritage listed Lord Howe Island Group, comprising offshore islands and islets, surrounding reefs and reef passages. Hence, interviewees found it difficult to distinguish some parts of the Lord Howe Island Group as being more important than others. For example, one resident commented:

*Yeah the whole of the Lord Howe Island Group I think ... it's special so I couldn't identify one place as being more special than another... or for any reason.*

Ruth (Islander descendant, female, 50s, interviewee's guesthouse, semi-structured interview, May 2011).

Although Island residents agree that the whole Island is important and needs protecting, they draw upon different understandings of *islandness*, which facilitates different knowledge in relation to *how* to care for the Island and *what* to care about. This diverse knowledge of caring for the Island displayed by Island residents can best be understood as a *continuum of knowledge of caring*, where knowledge of caring for the Island is positioned along a sequence from embodied knowledge to rational knowledge. Figure 4.1 shows a diagram of this continuum of knowledge that inform different ways of caring – Island residents' embodied knowledge and environmental managers' rational knowledge. This diagram represents a simplified version of this complex relationship, but in reality seepages and overlaps occur between rational and embodied knowledge, with each informing the other.

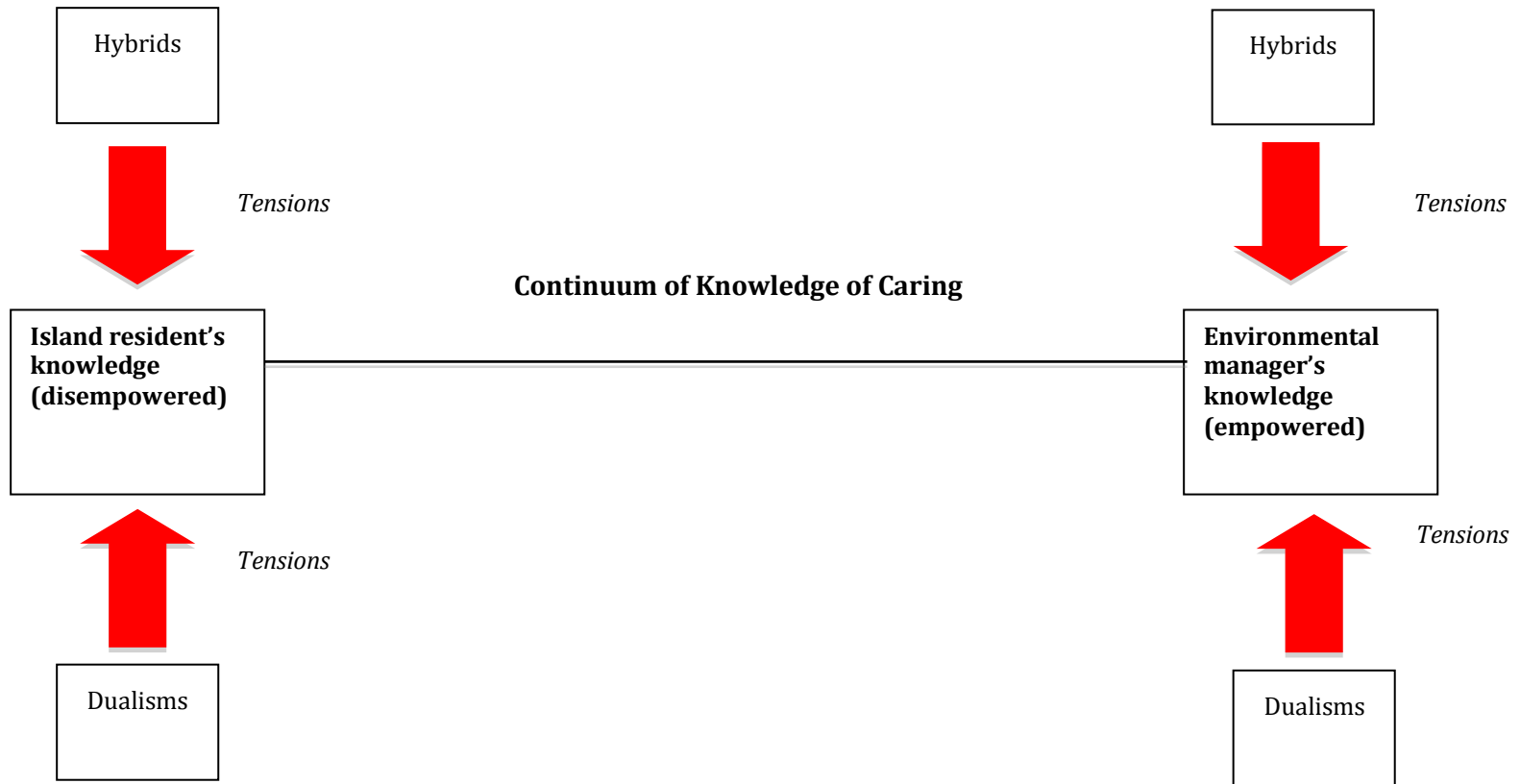


Figure 4.1: Continuum of knowledge

For Islander residents, their talk of caring for the Island intersected with the process of boundary-making is illustrated through four sets of discourses: caring for the Islander self through caring for the Island; caring as birthright; caring for beauty; and caring for biodiversity. Discourses of birthright are important to understand how *islandness* intersects with caring for the Island. Islanders who are lineal descendants of the early settlers have a long family connection to the Island, which dates back multiple generations. Hence, Islanders define their ‘traditional’ Islander status and relationship to the Island in terms of how many generations their family has lived on the Island. As one Islander explained, “you’re not regarded as a true Islander unless you’ve been here for about four generations” (Greg, Islander descendant). Because of this shared family history, Islander descendants share strong kinship ties with one another,

*There’s a strong bond between all the relatives ... they mightn’t indicate that ... they’re not really close; they don’t live in one another’s pockets and they’re very independent but they still have a great attachment to the family and other community members.*

Russell (Islander descendant, male, 60s, interviewee’s guesthouse, semi-structured interview, May 2011).

The idea of birthright also gives rise to a sense of ownership of the Island. When asked why the whole Island is meaningful, an interviewee responded,

*I think probably because of our heritage ties to the Island ... we feel like we belong, you know, and it belongs to us. We are very proud of the place for what it is and we want to keep it. The ‘it’ is without exception really.*

Russell (Islander descendant).

This interviewee illustrates a reciprocal relationship between himself and the Island based on the concept of birthright. In this narrative, Western ideas of human-centeredness and ownership underpin the human-nature

relationship, where the non-human – the Island is not given agency or autonomy (Plumwood, 2009).

Similarly, an Islander by law, who is married to an Islander descendant and lives on the Island permanently, commented:

*I'd have to say that the whole Island, really. It's quite hard to just pick out one particular thing that's really important ... It's sort of small enough to make you feel like you've got a strong sense of ownership of the whole thing, whereas on the mainland, you tend to have particular geographical locations that people have an affinity to. Here it tends to be that the Islanders really feel strong ownership over the whole of the environment.*

Matthew (Islander by law, male 40s, picnic table overlooking the lagoon, semi-structured interview, May 2011).

This interviewee draws on the inherent island characteristic of smallness to inform his relationship to the 'whole Island', which is also one based on the notion of ownership and western ideas of human-centredness.

Islanders with these genealogical ties to the Island take a great deal of pride in their family history and show a deep sense of attachment to the Island as home, For example, an Islander descendant (female, 50 something) explained:

*I am fifth generation ... I think the families that have been here for generations like my family came through in 1854, we have a real - I don't know... attachment to the place and we don't want to see it exploited or destroyed, um, because it's been our home for a long time and our family home for a long time and we just don't want to see it change.*

Ruth

This interviewee draws on Western notions of home and heritage as an anchor point and refuge for identity. Her identity as a descendant of the

early settlers is expressed as a familial identity that cannot be separated from her knowledge of caring for the Island.

Islander descendants also talked about place-based attachments to the Island developed through their labour such as fishing, fish feeding, shelling and gardening. Islander descendants reveal that through these working relationships they have an intimate working knowledge of the Island. For example, an interviewee was asked why he values the whole Island, in his response, he indicates that since childhood he has developed a '*relationship*' with the Island,

*Just a relationship. I think you grow up with it. Like when I came back here I'd been off the Island for forty years but I still know where all the fishing holes are and when they're biting ... so you grow up with it.*

Greg (Islander descendant, male, 70s, interviewee's home, semi-structured interview, May 2011).

As the interviewee explains, through fishing as a child he has developed a special relationship with the Island.

Equally, Islander descendants bounded the Island through discourse of beauty. For example, an interviewee explained:

*Well it all is when I submitted my map. You know, you said to highlight some points and I just circled the whole Island. I mean all parts of the Island are just incredible as you are probably aware and it doesn't matter where you are there's beautiful places everywhere so everywhere is the utmost important to protect it and keep it as it is for as long as possible.*

Bob (Islander descendant, male, 60s, Interviewer's accommodation, semi-structured interview, May 2011).

Understood as a beautiful place, Islander descendants wish to protect the Island from change. As this interviewee stated, he hopes to '*keep*' the Island '*as it is for as long as possible*'. To care for this beautiful place thus becomes

a process of stopping environmental change by using the present as a benchmark.

Alongside beauty, interviewees including Islander descendants and other Island residents, tapped into the Western idea of isolation to explain the special qualities of the Island. For example, an interviewee commented:

*The whole place is very special to me. Yeah it's almost a spiritual thing. Sometimes it just hits you in the guts when you look at the beauty of the place and I love solitude; the changes of seasons; the birds coming and going; the association with all those things I really tune into and it's nice to recognise them.*

Elizabeth (Islander descendant, female, 60s, interviewee's shop, semi-structured interview, May 2011).

This narrative reveals that Islander descendants draw on Western cultural discourses where the mind is rational and set free from the body, but the soul is spiritual. The interviewee also draws on Western ideas that facilitate an understanding of the Island as beautiful. She talks about intimate nature-based attachments to the Island such as '*the changes in the season*' and '*the birds coming and going*' and how she is shaped by the Island by tuning into and recognising the non-human agency of the Island.

Those on the Island who are not Islander descendants but residents who have gained their legal Islander status by residing on the Island continuously for ten years, or temporary non-Islander residents, also talked about their love and respect for the *whole* Island. Although these residents do not display intimate knowledge about the Island passed down through generations, their affection for the place informs their knowledge of caring for the Island. For example a non-Islander explained:

*One of the criticisms I've heard about World Heritage - it means a lot more people who aren't Islanders are living here; working. But all those people that I've ever spoken to have absolute love and respect for the Island. And they're actually trying to make it a better place and*



*therefore they're adding value and I think any person that is adding value to a place is worth having around.*

Carl (Non-Islander, temporary resident, male, 30s, Lord Howe Island Central School, semi-structured interview, May 2011).

Other residents who do not have early settler heritage draw on different discourses of *islandness*. Aligned with the idea of beauty and isolation is the concept of the wild. Some Island residents draw on notions of wilderness to inform their understandings of nature:

*Interesting quote for you from Tim Flannery, who's another regular visitor to the Island ... He entered the debate on the preservation of the Australian environment generally in a newspaper article I read about three or four years ago. And his whole thrust was that you can't really say that when white people came to Australia that the environment was in a pristine state because the Aboriginal people had been changing it for about seventy thousand years ... He said that except for Lord Howe Island, so we may have the only bit of Australasia here that has been almost pretty much in its same state as it was a million years ago. So it's pretty awesome when you think about it. So that gives us quite a bit of extra responsibility I think to look after it. We've inherited something and we know some things have been lost: some species of birds ... probably a few plants and things that have disappeared and others that are threatened. But we've got a pretty good idea of what it was like two hundred years ago when it was discovered and everything has been done to try not to lose that and to get it back to there. So I think that's quite special.*

Arthur (Islander by law, male, 50s, Lord Howe Island Museum, semi-structured interview, May 2011).

This interviewee's knowledge of caring for the Island draws upon notions of wilderness and 'external nature' where the domain of 'pristine' nature is distinctly separate from the human domain and consequently humans are

positioned as a threat to environmental conservation. Similarly, other non-Islander descendant residents considered humans as a threat to the Island:

*Threats? Yeah. So in the last two hundred years all these things have been brought to the Island and these are things that do threaten the integrity of the ecosystem on Lord Howe Island because the Island species have evolved in isolation for millions of years. And it just happens that on Islands, organisms can become very vulnerable to the impacts of these introduced plants and animals.*

Robert (Islander by law, male, 60s, Lord Howe Island Museum, semi-structured interview, April 2011).

As a renowned naturalist and author, this permanent resident spends a lot of his time, researching and documenting the natural values of the Island. As a naturalist, he talks about nature in terms of ecosystems, Islands organisms, Island species, evolution, and vulnerability. For this interviewee, human introduced plants and animals threaten the integrity of the island.

Hence, Islander descendants and other Island residents' knowledge of caring for the Island are diverse. Whilst some residents' knowledge is historicised and personalised, other residents' knowledge for caring is rational and draws upon the language of science and concepts of Island ecology. It is apparent that Islander descendants wish to prevent the Island from changing in order to sustain a sense of self, which is tied to the cultural heritage of the Island. For other residents, affection for the Island informs their knowledge of caring. This group's knowledge of caring for the Island draws on dualistic understandings of the world as well as hybrids.

#### **4.5 Environmental managers' talk of *islandness*, boundaries and caring for the Island**

For environmental managers their talk of caring for the Island intersected with the process of boundary making. This is illustrated by two sets of ideas: scientific discourses of *islandness* and vulnerability and a recognition

of the impossibility of containing and bounding plants and animals. Because environmental managers hold the capacity to make management decisions about the Island, these discourses of *islandness* have significant implications for the environmental management of the Island.

The way some environmental managers talk of Lord Howe Island nature illustrates Western ideas of wilderness, and the pristine. Consequently, the Island becomes an important place that needs to be protected from humans, and the introduction of 'invasive species'. For example, one environmental manager commented when asked about the Island:

*I really like Little Island. It's just got something, you know, where you walk through a palm forest and it opens up to these cliffs that are just circling with thousands and thousands of Providence Petrels. And walking along the lower road, just the sheer - I guess, there's an element of excitement and adventure to it - but also just that raw kind of exposure and just that wild side of it: where you've got oceans and wind smashing against it. You're just really affected by nature here.*

Gary (Environmental manager, male, 40s, Lord Howe Island Board Office, semi-structured interview, May 2011).

For this interviewee, nature in its *pristine* state is devoid of people, 'wild and raw'. Tapping into discourses of nature as wild, the Island is experienced as exciting and adventurous. For this environmental manager, nature is seemingly understood as something 'out there' to be tamed.

Other environmental managers talked about caring for the Island based on generalised and abstract principles of island ecology. Informing these environmental managers' practices are inherent island characteristics such as boundedness, separateness, isolation and smallness. As three interviewees explain, these island characteristics allow them to manage the environment in ways they would not normally use on the mainland:

*Lord Howe Island is a finite landscape its surrounded by ocean and that makes it really amazing. It's got settlement in a confined area; it's*

*eighty five per cent vegetated. There's lots of great opportunities to really make this place function a lot better ecologically.*

Ray (Environmental manager, male 30s, Lord Howe Island Board Office, semi-structured interview, May 2011).

*The mainland's more about control: just controlling the weeds. And over here we're going through eradication of certain species so it's a different approach ... I guess also it's not as disturbed: the forest and bush. So it's not a lot of habitat creation: all that stuff you do in Sydney. It's all like urban bushland and is all mosaiced and separated from each other. So here it's kind of you just go in and kill the weeds and you know that the bush is resilient enough to not have to plant things out and that sort of stuff ... it's going to regenerate pretty well on its own.*

Tony (Bushland Regenerator, male 30s, Lord Howe Island Board Office, semi-structured interview, May 2011).

*In a sense, as you experience with working on the mainland a lot of issues there because you've got huge disturbed landscapes and an endless supply of weeds whereas here you've got one nice contained area.*

Pamela (Environmental manager, female 30s, Lord Howe Island Board Office, semi-structured interview, May 2011).

Rather than just controlling weed species, environmental managers understand that opportunities exist to eradicate these introduced species from the Island ecosystem. The 'Weed Eradication Program' is a major initiative undertaken by the Lord Howe Island Board. An environmental manager makes decisions in regards to whether introduced plant species 'belong' on the Island. These decisions are based on the 'Plant Importation Policy', which acts as a form of border control by preventing the importation of introduced plants species that may potentially threaten the Island ecosystem. This environmental manager is responsible for ensuring that introduced plants proposed for importation do not constitute a known 'threat' to Island ecology:

*I'm responsible for rolling out the weed eradication plan, making sure that any plant imports aren't going to threaten ecosystems here. So I consider that ... to the best of my capacity to research to make sure I'm making a wise decision about whether a plant should come in or not so, hence, that my decisions aren't going to jeopardise the Island in the future. Like I would probably feel really bad that if in fifty years time I heard that a plant that I allowed to come in has gone crazy on the Island ...*

Pamela (Environmental manager, female, 30s, Lord Howe Island Board office, semi-structured interview, May 2011).

The same environmental manager explains that in order to ensure that introduced species do not present a threat to Island ecosystems, she consults the 'World Compendium of Global Invasive Species':

*I feel quite evil sometimes because people love plants ... moving flora around and having different things in their garden. So we have to sort of scrutinise quite heavily, "Are we going to allow a plant in that's going to go berserk in fifty years time and create a cost to the Board?" So I have to look at the World Compendium of Global Invasive Species and ... look how it reproduces and stuff like that.*

Pamela (Environmental manager female, 30s, Lord Howe Island Board office, semi-structured interview, May 2011).

This environmental manager talks of plants that do not belong on the island as 'crazy' and going 'berserk'. She clearly understands her job as being to keep the ecosystems in order through a form of border control. This border control is also talked about as minimising future costs to the Board. She provides a clear understanding of 'weed' on Lord Howe Island:

*There is records that we look at. So a weed, yeah, as you know it has big ... description thing, but for here, if it's something that's going to be displacing native plant species or changing the habitat for fauna, for instance, something that might be creeping over the ground and*

*stopping woodhens from foraging; something that's demonstrating it's capacity to move into bushland areas; or something that's going to compromise agriculture too.*

Pamela (Environmental manager female, 30s, Lord Howe Island Board office, semi-structured interview, May 2011).

The discourse of *nativeness* is central to her definition of a weed. Because flora and fauna species have evolved in isolation a number of species are endemic to the Island, that is, they are 'native' only to Lord Howe Island. Hence, some plant species that are native to the mainland are not necessarily native on the Island such as the Illawarra Flame Tree. Pamela tells of her shock at finding an Illawarra Flame Tree (*Brachychiton acerifolius*) on the Island:

*It's not native here but I think maybe the currawongs are getting into it but we've been getting plants from ... seedlings ... up to thigh high and it's like: "Far out! Will Lord Howe Island turn into a subtropical rainforest of the Illawarra?"*

Pamela (Environmental manager female, 30s, Lord Howe Island Board office, semi-structured interview, May 2011).

Drawing on discourses of conservation biology, this interviewee's environment management practices, informed by discourses of *nativeness* (Head and Muir 2007), become a form of border control. Plant species that are understood to have the capacity to change the ecology of the Island are declared weeds to be banned or eradicated even where they are being propagated without human involvement.

It is evident in some environmental manager's talk how their idea of *islandness* is embedded in dualistic thinking where culture and nature are separated into binaries. This understanding of the world, fails to acknowledge the interconnectedness that exists between the human and non-human world. Environmental management relies upon the concept of

an external nature, whereby protected area management involves delineating boundaries between the human and non-human world.

Under the Lord Howe Island Local Environmental Plan and the Management Plan for the Permanent Park Preserve, Lord Howe Island is legally divided into two distinct areas for management purposes:

- the settlement area, which comprises residential and agricultural lands, including all tourist accommodation and retail outlets; and
- the Permanent Park Preserve, which encompasses a large part of the Lord Howe Island Group including offshore islets and islands such as the Admiralty Islands and Balls Pyramid.

As stated in the management plan, the Permanent Park Preserve is set aside for conservation and scientific research:

*The preserve was created on 1 January 1982 when the 1981 amendments to the Lord Howe Island Act 1953 (LHI Act) came into force. This was the culmination of more than one hundred years of scientific interest in the geology, plants and animals of the Island, and concern for conservation of its outstanding natural scenery and biota.*

(Department of Environment, Climate Change and Water, 2010)

This understanding of protected area management often relies upon the notion of external nature, where nature is positioned as independent of culture and a phenomenon that is observed objectively. This dominant view of nature marginalises alternate understandings of the world including those generated through experience and association (Gill, 1999). An interviewee who advocated the zoning approach echoes this notion of external nature:

*I support the view of the zoning approach so different areas on that map are for conservation; different areas on the map are for open space; and different areas are for settlement. And so they all have different purposes or objectives but there is this underlying issue that*

*we're all part of the World Heritage Group and so anything in any zone shouldn't impact on that principle.*

Gary (Environmental manager, male, 40s, Lord Howe Island Board Office, semi-structured interview, May 2011).

Yet, environmental managers are aware of the limitations of the protected area management approach (as reflected in the qualification in this quotation) that activities in any zone should not impact on World Heritage values. Similarly, another environmental manager told of vegetation corridors going through the settlement area, linking the north of the Island to the south, connecting important habitats for native species. Hence, environmental managers' lived experiences of the Island conflict with management strategies that delineate boundaries between the human and non-human world. For example, an interviewee tells of fluctuations in the Lord Howe Island Woodhen (*Gallirallus sylvestris*) population, an endangered, endemic bird species on the Island:

*We're up to nearly three hundred woodhens from what was down to thirty seven and so that's massive. It's one of the most successful recovery projects anywhere in the world but now there's an opportunity to improve a few things 'cause we've had some fluctuations in the population just recently. It looks like birds are coming down to the settlement area more and leaving some of the other habitats ... and I had this same issue on the mainland with other species like brush turkeys where people have resources in their backyard. Whether they feed them; whether they leave out dog food or other scraps or compost; and they just get into those. You can see how common they are around the waste management facility. They are a scavenger and so they're in a sense leaving what was maybe marginal habitat because there's prime resources in the settlement area. And that's a problem - that's a real problem.*

Gary (Environmental manager, male, 40s, Lord Howe Island Board Office, semi-structured interview, May 2011).



This narrative reveals that woodhens prefer to inhabit the settlement area rather than the Permanent Park Preserve, which is understood by the interviewee as the bird's habitat. Hence, environmental managers are unable to control the agency of non-human entities and the lived experiences of the Island such as the movements of the woodhen population. For this environmental manager, how the woodhen has moved across the imaginary boundary between the permanent preserve and the settlement, constitutes a 'real problem'.

## 4.6 Conclusion

The aim of this chapter was to investigate how and why people care for the Lord Howe Island. Two intersecting themes emerged in the discourse analysis that helps explain how and why people care: *islandness* (Baldacchino 2006; Hay 2006; Jackson 2006 & Stratford 2006; 2008) and boundaries (Braun & Castree 2001; Gill *et al.* 2009). Everyone agreed that Lord Howe Island is a place worth caring for. Both Island residents and environmental managers understand the Island as an incredibly important place that needs to be protected. However, what they cared for, and how they cared, drew on different knowledge-making practices that bounded the island in different ways. While there was sometimes commonality in terms of the properties of *islandness* and boundary-making process, often these were divergent. This is because environmental managers' knowledge of caring for the Island is primarily informed by scientific discourses of *islandness* and vulnerability (Bade 2010; Dodds & Royle 2003; Kueffer 2010;). In contrast, Islander descendants often draw on discourses of heritage, birthright, ownership and their lived experiences to care for the Island (Truscott 2000, Harrington 2004 2009). Not only do environmental managers and Island residents often prioritise different knowledge to justify what to care for and how to care, they are differently positioned in the hierarchy of environmental management decision-making. Consequently, the stage is set for conflict over environmental management decisions. The next chapter will illustrate how these different knowledges play out in the context of a number of case studies of environmental management conflicts on the Island.

# Chapter Five: Conflict



Entrance to the Permanent Park Preserve at Malabar Ridge

## 5.1 Introduction

As outlined in the previous chapter, Island residents and environmental managers agree that the whole Island is important and needs protecting, and both are keen to contribute. However, the two groups draw on different understandings of *islandness* (Baldacchino 2006, Hay 2006, Jackson 2006, Stratford 2008) and *boundaries* (Gill et al 2009, Braun and Castree 2001), which inform their knowledge of caring for the Island. Consequently, conflict arises between the two groups in terms of what should be protected and what belongs, and does not belong, to the Island. The aim of this chapter is to use a number of case studies to explore different points of contention that emerge between some Island residents and environmental managers to illustrate what the conflicts are about and why they occur.

Tensions exist between environmental managers and Island residents in relation to a number of plants and non-human animals on the Island. Environmental managers understand some plants and non-human animals as introduced

species, talking about them as ‘invasive weeds’, or ‘feral animals’ that threaten the native biodiversity of the Island. On the other hand, for some Island residents, in particular descendants of the early settlers, the same plants are important aspects of the Island’s intangible cultural heritage. Examples include, Bush Lemons (*Citrus jambhiri*), Cherry Guava (*Psidium cattleianum*) and Norfolk Island Pines (*Araucaria heterophylla*). Due to the isolation of the Island, self-sufficiency and self-reliance figures prominently in the early history of the Island. Useful plants to Islanders did not follow the neat classification of ‘native’ and ‘introduced species’. Introduced species such as Cherry Guavas and Bush Lemons, as well as native fauna including muttonbird and Sooty Tern eggs provided sustenance and nutrition to the early settlers and their descendants (Nichols 2006). The categories of ‘introduced species’ and ‘native species’ make little sense in the culture of natures of Islanders (Gill et al 2010, Waitt et al 2009). Interviews showed that some Islander residents have strong cultural associations with some plants categorised as introduced species by environmental managers, as well as different views on managing native species.

Management conflicts examined in the case studies in this chapter did not necessarily divide along obvious lines. In some cases Island residents considered some environmental management processes to be having detrimental effects on native species, as well as being concerned about the cultural values of both native and introduced species. Environmental managers recognised that while there were often common goals, they had sometimes used strategies that unnecessarily alienated Islanders, such as the proposal of the rat eradication program. In some cases there also seems to be the potential to achieve environmental management goals while satisfying cultural protocols. This is not a case of privileging a particular environmental knowledge, but rather facilitating a process of developing appropriate management strategies that enables different types of knowledge to work towards a particular environmental management goal.

## 5.2 Cherry Guava (*Psidium cattleianum*)

Conflict arises between Island residents and environmental managers in terms of the appropriate management of plants - categorised as introduced species by environmental managers, yet culturally meaningful to Island residents.

Ecological research shows that Cherry Guava has detrimental impacts on Island ecosystems - the International Union for the Conservation of Nature (IUCN) has declared Cherry Guava as the “*worst woody weed of subtropical island Ecosystems in the world*” (DECC, 2007). Cherry Guava is an introduced species to the Island and is listed as noxious under the *Lord Howe Island Regulation*. The plant is described in the Biodiversity Management Plan for the Island as a woody weed, which is primarily dispersed by birds. In the Plan, Cherry Guava is classified as a threat to the biodiversity of the Island because it spreads into intact forest and prevents the growth of native species. Consequently, Cherry Guava is a target species for the Weed Eradication Program that is currently being carried out on the Island (DECC, 2007).

Overlooked in the Weed Eradication Program are Island residents’ cultural attachments to Cherry Guava. Over the years, Islanders have harvested Cherry Guavas and eaten the fleshy fruit. The Red Cherry Guava was particularly popular amongst residents and the fruit was cooked to make jams and jellies. Collecting and cooking Red Cherry Guava is talked about as an Island tradition and is linked to the early settlers who relied on the fruit as a source of vitamins. Islander respondents described collecting Cherry Guavas as an enjoyable experience, an annual outing with the family that they looked forward to every year. Harvesting guavas is an expression of the Island way-of-life and identity (Truscott 2000). For some Islander descendants the practise of picking and cooking Cherry Guava is associated with childhood and family memories:

*my mum made guava jelly and she died last year and Easter was the time when we used to go and pick the guavas and then we’d boil them up on the stove in a big pot of water and then strain them through some muslin or something and take them out and you’re left with this fruit that had been boiled up with water and then you’d have you’re*

*juice and .. you'd make the most wonderful jelly. It's just fantastic it's just a jam but it's just really beautiful.*

Sarah (Islander descendant, female, 30s, interviewee's home, semi-structured interview over a cup of tea, May 2011).

For this interviewee, the lived experience of collecting guavas and making guava jelly is tied to memories of her mother and reflects unique Islander traditions.

Another interviewee explained the importance of the Cherry Guava not only to Island residents, but also, in their view, to native birdlife:

*You can grow them on the mainland and it's been part of the Island people's staple diet and they were grown here originally by the early settlers as a vitamin C thing for the whaling ships .. They were up in the mountains. There they weren't doing much harm. There's a lot of other weeds that are doing more harm, noxious weed Crofton.. the Cherry Guavas were providing something to.. the Currawong and the Silvereyes which are protected, so there's a thought that perhaps they shouldn't have taken the guavas out.. For years they grown Cherry Guava wine, jam, eaten them just as fruit salad. They're a phenomenal thing to eat.. Even the tourists used to enjoy along the side of the road with Cherry Guavas growing.. The authority, the National Parks.. they become paranoid and the person who head of the National Parks.. doesn't seems to worry about the birdlife or the people's rights.*

James (Islander descendant, male, 60s, Guest house lounge, semi-structured interview, May 2011).

These narratives reveal that Cherry Guava has had both practical and symbolic roles in sustaining the Island way-of-life and Islander identities. Hence, collecting, cooking and eating Cherry Guava constitutes an important aspect of the intangible cultural heritage of Lord Howe Island. The interviewee above uses the term '*paranoid*' to describe environmental managers' efforts to eradicate Cherry Guava from the Island. For him,

introduced species show varying degrees of impact on the Island, therefore not all introduced species present a threat. The interviewee argues that the Cherry Guava makes positive contributions to the Island ecosystem, stating that the fruit provides a food source for native bird species. This understanding of introduced species clashes with environmental managers' knowledge of caring for the Island, which recognises all plants categorised as noxious weeds as a threat.

Environmental managers' knowledge of caring for the Island cannot be separated from discourses of *nativeness* (Head and Muir 2007), which classifies flora and fauna species in terms of whether they belong to the Island. Although one environmental manager shows great affection towards Cherry Guava plants, in order to protect the '*big picture*', Cherry Guavas need to be not just controlled but eradicated from the Island as a noxious weed:

*Cherry Guavas.. is a classic because oh man it tastes amazing, it's a beautiful.. oh I love it, its amazing ..bit tarty and has a really nice flavour so I can appreciate people want to hold on to that plant. So again I go round doing noxious weed inspections. I just go oh great, I'm telling people to get rid of a plant that they have a strong association with and I'm guilty also because when we were living at Byron Bay we were managing a hundred hectare property there and there was a Cherry Guava in the garden and my partner was going Pamela you've got to get rid of that, its really bad. And I'm going oh, but I love eating it. He goes, the birds are eating it more than you, and I was like, no I want to keep it. And then we left and I'm thinking oh no, have I just created an environmental disaster. So I guess.. the Board's going ok weed eradication, noxious weed legislation, oh ok Cherry Guavas bad. I have to go to a resident, ok I'm sorry, you have to get rid of your Cherry Guava plant.. I just sort of try and say things have changed, we're trying to look at the big picture. Here, there are a range of other plants you can plant.*

Pamela (Environmental manager, female, 30s, Lord Howe Island Board Office, semi-structured interview May 2011).

For this interviewee, her embodied experiences of eating Cherry Guava conflict with her rational knowledge as an environmental manager, which bounds the Island in terms of generalised and abstract principles of island ecology (Dodds and Royle 2003, Kueffer et al 2010). Hence, the interviewee constitutes Cherry Guava as a noxious weed that represents a potential '*environmental disaster*' and therefore needs to be eradicated from the Island.

Numerous interviewees expressed resentment towards the plan to eradicate Cherry Guava from the Island. Interviews revealed that Island management did propose to construct a Cherry Guava orchard so that residents could continue to harvest Cherry Guava. But the proposed orchard had a set of strict conditions, which were ultimately unacceptable to islanders:

*It was addressed that the community could have a Cherry Guava orchard if it was fully enclosed, bird proof, with a locked gate on it and a committee formed to manage that, so that there were no breaks in the bird proofing and so that the cage was kept locked and that whoever used it was being responsible. So the Board actually allocated money to build that but nobody from the community came forward to want to be on that committee to manage the guava, so rightly so it didn't go ahead.*

Robert (Islander by law, male, 60s, Lord Howe Island Museum, semi-structured interview, April 2011).

As this interviewee explains, without a resident to manage the Cherry Guava plants the plan to build an orchard could not go ahead. Interviews with Island residents told of their cultural attachment to the Cherry Guava and their traditions of picking the fruit and cooking it to make jams and jellies. Hence, this proposal to enclose the plant for the community in an orchard did not reflect the traditional practise and experiences of picking the fruit.

The conflict over Cherry Guavas may be understood in terms of divergent knowledges that inform different way of caring for the Island (Waitt et al 2009). Scientifically informed management of Cherry Guavas as an introduced species overlooks residents' intangible cultural attachments.

### 5.3 Bush Lemon (*Citrus jambhiri*)

Interviewees talked about Bush Lemons in terms of a food source and a symbol of Island history. They explain that Bush Lemon trees were planted deliberately to provide a reliable food source to seed collectors in sites remote from the settlement:

*Interviewee 1: in the old days the men planted.. bush lemon trees.. They were deliberately grown because the old fellas would leave at daylight and come back at dusk when they were gardening or seeding*

*Interviewee 2: they had lemon trees planted in Erskine Valley and all over the place*

*Interviewee 1: in all the places that they'd stop*

*Interviewee 2: with their seeds, and they could have a feed of lemon*

*Interviewee 1: but the Board said they're not native, you can't have them growing in the Permanent Park Preserve, chop them down, instead of saying ok, they are there for a historic reason, leave them there, put a note on the tramping things if you come across a bush lemon tree. You know they've huge thorns and the skins all wrinkled and misshapen and they're not a pretty fruit to look at, but they're there for a reason.*

Jack and Sally (Islander descendant and Islander by law (male and female, 60s, interviewees' home, semi-structured interview with married couple).

Similarly to Cherry Guavas, for these interviewees, Bush Lemon trees and the narrative attached to them represent a significant aspect of the Island's intangible cultural heritage. Interviewees 1 and 2 draw on concepts of pride, family heritage and traditions, which inform their understanding of Bush Lemon



trees as a meaningful plant that belongs to the Island regardless of it being categorised by environmental managers as an introduced species. Islander descendants' knowledge of caring cannot be separated from these concepts. It seeks to maintain links with cultural heritage in order to sustain a place-based sense of Islander identity.

Yet, Bush Lemons, unlike Cherry Guava plants, have not triggered an avalanche of publications reporting their detrimental effects on the Island's biodiversity. Nor have they been listed as a noxious weed under the *Lord Howe Island Regulation*.

It seems, however, that the general working assumption among environmental managers has become: if it is not classified as 'native' a plant is out of place. Environmental managers' knowledge of caring for the Island is underpinned by discourses of *nativeness*, which positions Bush Lemon trees as weeds that have the potential to get out of control and upset the 'natural order' of the Island ecosystem, and therefore need to be removed.

Similar to the Cherry Guava case study, the story of the Bush Lemons illustrates how aspects of intangible cultural heritage and the reciprocal relationships between some Islanders and this plant are overlooked when environmental management plans are informed solely by ecological principles.

## **5. Goats**

Goats and pigs were introduced to the Island during the 1800s as a source of food for passing whalers (Nichols, 2006). Feral pigs and cats were eradicated from the Island by the 1980s. Efforts to remove goats from the Island began in the 1970s and by 1999 most goats had been culled, apart from three non-reproductively capable nannies. There was no detailed assessment of the impact of feral goats on the Island's biota before the eradication attempt (Parkes et al, 2002). Instead, the Island management drew on conclusions of environmental scientists that illustrate how goats generally destroy vegetation through trampling, browsing and grazing, as well as spreading and promoting the establishment of 'exotic species' in

remote areas (Campbell et al 2005), and decided that a 'precautionary' approach was justified .

Goats and pigs were often fondly talked about by some Island residents, particularly Islander descendants. For instance, some residents stated that they 'loved' the goats and viewed the goat eradication as 'cruel'. Some older residents told of their enjoyment when pig hunting on the Island in earlier times, and having cats as pets to control rats. Interviews revealed that some residents believed that goats in small numbers kept the bush 'clean' by controlling some noxious weed species such as asparagus fern (*Protoasparagus plumosus*):

*We used to chase goats all along here and then up on the mountains, and the pigs. There was wild goats all along there and of course they used to eat the asparagus but all the wise people decided that the goats were a nuisance. They'd only been there two hundred years and they kept the guavas down on these mountains. I agree, I mean there was five hundred up here [referring to south mountains] and about three hundred down there [referring to north mountains] ... and left them they'd have kept eating the asparagus. And now some places you can't get through the bush for the damned asparagus fern. That's an import and the experts did that.*

Jack (Islander descendant, male, 60s, interviewees' home, semi-structured interview with married couple, May 2011).

Western discourses of family heritage, home and traditions inform this interviewee's understandings that goats belong on the Island. For him, goats made positive contributions to caring for the Island by keeping weeds such as asparagus fern under control. The interviewee refers to environmental managers sarcastically as the 'wise people' and 'the experts', to show that he believes their decision to eradicate some feral animals was a mistake that does not benefit the Island. Feral species as a benefit to native ecosystems is now the topic of academic debates (Weeks and Packard 2009).

This case study illustrates how some residents draw on lived experiences and their status as Islanders to privilege their knowledge over science. This Islander dismisses quickly both scientists and discourses of *nativeness* that situate feral goats as a threat to the Island.

## 5.5 Sooty Tern (*Sterna fuscata*)

Sooty Terns (*Sterna fuscata*) are the most numerous of Lord Howe Island's seabirds, arriving on the Island in large colonies to breed each spring and summer. They lay one egg on the ground in September (Hutton, 2007). Sooty Terns are listed as vulnerable in New South Wales as a whole, under the *NSW Threatened Species Act*, but they occur in very large breeding populations on Lord Howe. Bird numbers have increased on the Island since the eradication of feral cats in 1979 and according to Island management the seabird now poses a threat to aircraft safety:

*In October 2007 Sooty Terns became an issue for aircraft safety at Blinkie Beach dune. When aircraft approached from the east, flying over the dune, the terns would lift into the air, posing a threat to aircraft. Early in October signs were that some Sooty Terns had settled on the dune, The LHI [Lord Howe Island] Board put out flagging to try to scare the birds away. This did not work entirely, as by this time some birds had laid eggs; and some eggs had to be moved*

Friends of Lord Howe Island Newsletter, No. 21, 2007

As explained in the newsletter, since 2007 large colonies of Sooty Terns have been nesting at Blinkie Beach dune to lay their eggs. Through interviews it was revealed by Island residents that a number of methods have been trialled in order to prevent Sooty Terns from nesting on the dune. One of these methods, spoken about frequently by interviewees was the destruction of large numbers of eggs by management authorities. While this management decision may be outside the control of environmental managers because it is a safety issue, interviewees perceived it as a decision made by those in charge of managing the Island. There was a strong perception among some Island residents that this large-scale

management intervention in relation to a native bird species was irrational and unfair:

*Sooty Tern eggs actually.. and mutton birds .. were harvested here by the older generation but very few of the new generation or the existing generation would have a taste for mutton bird because it's a developed taste.. If you were raised on it as a kid you'd love it but I don't love it .. But the Sooty Tern eggs I regret that, and I regret what is done with them. In other words they protect Blinky Bank by crushing over ten thousand eggs every season but nobody can eat them.. What a waste.*

Barry (Islander descendant, male, 70s, on the veranda at interviewer's accomodation, semi-structured interview, April 2011).

This interviewee shows resentment towards the management of the Sooty Tern eggs on Blinkie Bank and perceives the act of destroying them as a 'waste'. As this person explained, Sooty Tern eggs were harvested and eaten by the early settlers and their descendants. This Island practice is no longer permitted because this bird species is listed as vulnerable (*Threatened Species Conservation Act 1995*). Interviewees argued that if residents were permitted to collect Sooty Tern eggs, only a small portion of the community would wish to do so. Hence, the act of destroying large numbers of eggs is contentious for some residents who view it as wasteful and disrespectful to the small portion of residents on the Island today who would like to eat Sooty Tern eggs.

Some Island residents expressed resentment towards this management practice because it does not recognise local residents' knowledge:

*They ignore local knowledge they do, and that's another one of my issues, but if there's something they want to do they'll just do it ... Every year we have a problem over here on the sand dune with wide-a-wakes [Sooty Terns] and what they're doing is not necessary and I'm the only one with any relevant experience. You know I've flown aeroplanes high speed, low speed. I've had bird strikes. The only one*

*with any relevant experience, and they just won't listen to me. They just do what they want to do. And it's a threatened species and they're quite happy to knock off four thousand eggs... Rather than give them to the people that might use them they just smash them.*

Greg (male, 70s, interviewee's home, semi-structured interview, May 2011).

This interviewee is clearly frustrated at not being able to contribute to management decisions, even though his experience as a pilot gives him significant knowledge about bird strikes and aircraft safety. He perceives environmental managers as ignoring local knowledge, stating, '*if there's something they want to do they'll just do it*'.

The responses to Sooty Tern management reflect the divergent knowledge positions. Islanders indicate that they want to be involved in decision-making, and they believe they should be able to harvest and use any eggs which need to be destroyed. Environmental managers are perceived by Islanders to make decisions independently, and clearly separate native species and resource use (Weeks and Packard 2009). They do not understand that it may be appropriate to use the eggs, or that it might be offensive to Islanders, who practised harvesting the eggs, not to allow the eggs to be used.

## 5.6 Access to Mount Lidgbird

Environmental management delineates the southern mountains – Mount Gower and Mount Lidgbird - as areas of '*high conservation priority*'. The Biodiversity Management Plan (2007: 46) states:

*Expert opinion regards the southern mountains as being areas of significant conservation priority due to the high level of endemism and significance of threatening processes such as climate change and human impacts operating in these areas*

Because of the importance of the southern mountains as a '*high conservation priority*', management has declared Mount Lidgbird as a '*scientific reference point*'. Consequently, access to the mountain has been restricted (except for Goat House Cave walking track which ends some distance from the summit). The Permanent Park Preserve Plan of Management states that access to the area is not permitted to residents and visitors, unless the Board of Management grants permission or the visit is for research purposes (Department of Climate Change and Water, 2010).

Island residents have a long association with the southern mountains. Although Mount Lidgbird is difficult and dangerous to climb, residents and visitors have been climbing to the summit for many years. Interviewees described the long association with the mountain as a recreational pursuit, a family tradition that is passed down through generations. Hence, restricting access to the mountain has implications for Islander identity:

*That has some implications. There are people on the Island who have strong recreational ties to Mount Lidgbird. Its only a few, its not as if there are hordes of people running up there, but for some people it is part of their being, part of their way of life to have access to it, just as their fathers or grandfathers did, And here on the Island there's limited opportunities for people to express who they are and where they're from and that is something that some people hold dearly, so to be prohibited from accessing that I believe should have been more publicly discussed.*

Robert (Islander by law).

This interviewee questions management's decision to restrict access to Mount Lidgbird, arguing that this decision should have been publicly discussed with those who have strong cultural associations with the mountain. He draws on discourses of family heritage and tradition to inform his understanding of climbing the mountain as an expression of Island identity.

Interestingly, however, only a handful of participants that were interviewed knew of the restrictions relating to Mount Lidgbird. An interviewee gives his understanding of the decision-making process:

*I think National Parks Foundation lobbied very strongly to have it put off limits and National Parks ... for some reason they were given the job of drafting the amendments for the plan of management for the Permanent Park Preserve and somehow it slipped in and they excluded access to Mount Lidgbird. Good example of even though things are scrutinized quite closely here, sometimes things get through*

*without any public input and that's one example and that has pretty profound implications..*

Matthew (Islander by law, male, 40s, picnic table overlooking the lagoon, semi-structured interview, May 2011)

This interviewee argues that decision-making processes relating to the management of the Island do not always involve Island residents and thereby exclude Island residents' knowledge of caring for the Island.

Interviews showed how restricted access to Mount Lidgbird constrains what Island residents see as their ability to care for the Island. For example, an interviewee states:

*For myself I have accessed Mount Lidgbird many times, maybe about 15 times in the last 20 year,s and I have actually discovered a few new species of plants there. I've done plant surveys to determine their extent and been involved in having them listed by the government as threatened species that do need conservation attention and I've been told by somebody on the Board that I'm not allowed up there because they, meaning those people on the Board, have responsibility to look after the plants. But they are forgetting that, to get conservation working on Lord Howe Island, it does need the cooperation of the community and I feel quite put out that I have been excluded from that management conservation of those species when without my knowledge and interest the plants might not even be known.*

Robert (Islander by law)

The regulation of access to Mt Lidgbird again demonstrates reliance on different forms of knowledge in caring for the Island. The interviewee above argues that it is his personal experience on the mountain that has helped identify conservation priorities, but he has then been excluded by a management practice, which sees no need to involve residents in developing such controls. Conversely, once threatened species are recorded in a scientifically and bureaucratically maintained central



register, a process is triggered which is implemented without regard for individual circumstances. As exemplified in Chapter Four, the *whole* Island is incredibly important to Island residents and needs protecting. This case illustrates that restricted access to the summit of Mount Lidgbird constrains some residents' abilities to express their Islander identity and to care for and protect the Island as a whole reflecting the analysis by Truscott 2000 and Sullivan 2003.

## **5.7 Norfolk Island Pines (*Araucaria heterophylla*)**

Many of the mature Norfolk Island Pines that exist on the Island today were planted by the early settlers to provide windbreak and shelter and to mark out sea passages. Norfolk Island Pines on Lagoon Road provide a nesting site for White Terns that lay their eggs directly onto the tree branch (Hutton, 2006). After windy weather some Island residents check that the White Tern eggs or chicks are still precariously balanced on the tree branch. Hence, to most Island residents the presence of these trees is an integral part of sustaining their sense of self as an Islander.

One pair of mature Norfolk Island Pines at Lover's Bay is listed as a heritage item under Schedule 2 of the *Lord Howe Island Local Environmental Plan* and the trees are protected under the provisions of the plan. When asked if there were any places on the Island that are meaningful, an interviewee expressed personal attachment to the meaning of the pair of Norfolk Island Pines at Lover's Bay:

*I love everything here but one of the things that I really do like, and even though I don't particularly like Norfolk Island Pines themselves, I love those two that have been planted in memory of the mother and the daughter and which act as guides out the South Passage.. There's two trees planted there and when you're going out the South Passage you line these two trees up and when they become one you know you've got the Passage out and I just love the fact that they, this*

*person, thought outside the square and instead of putting an ugly plaque there .. this beautiful memorial to his family.*

Kate (non-Islander, female, 50s, Lord Howe Island Museum, semi-structured interview).

It is clear that the interviewee's affection for these two Norfolk Island Pines is based on the '*meaning*' of the trees rather than the actual plant species (Waite et al 2009).

Although environmental managers recognise the historical and cultural importance of Norfolk Island Pines, their knowledge of caring for the Island, which draws on scientific discourse of *islandness* (Dodds and Royle 2003, Kueffer et al 2010) and *nativeness* (Head and Muir 2007), positions them as an introduced species and hence, represent a threat to the Island that needs to be controlled.

Norfolk Island Pines are an introduced species on the Island and are seen by some environmental managers, and some Island residents, as a threat to the Island's biodiversity. As stated in the Biodiversity Management Plan, Norfolk Island Pines are restricted to the Settlement area, except for some at North Bay (DECCW, 2007). However, the Norfolk Island Pine population is spreading and forming what some environmental managers refer to as a '*monoculture*' on the Island. Environmental scientists suggest that Norfolk Island Pines prevent other native plant species from growing because they take up canopy space and change the soil chemistry so that it is unsuitable for the growth of native species (DECCW, 2007). An Islander, who has gained his legal Islander status and who spends a lot of time researching the Island, drawing on environmental science literature, explained how Norfolk Island Pines threaten the native vegetation of the Island:

*The Pines are seeding so they produce cones of seeds every April. So now you'll see big cones in the trees and they don't blow far, they might only blow twenty or forty meters with the wind.. but they do germinate and given time, if you could wind the clock forward 300 years you would find that the Pines would be pushing out a lot of the*

*native vegetation. They do that not only by spreading their seeds but the needles of the pines do drop and inhibit the germination of other plants, so they do have this ability to dominate and spread, so that is the threat to the native vegetation.*

Robert (Islander by law)

For this interviewee, Norfolk Island Pines present a threat to the native vegetation of the Island. As this interviewee explains, they do not present an immediate threat to the Island. Instead, the impact of this introduced species will occur over a long period of 'environmental time'.

Interviews with environmental managers suggest that their attempt to control Norfolk Island Pines by proposing to remove some of them has met with community opposition. Interviewees stated that not all Island residents were opposed to the proposal to remove some of the pines. For instance, some residents understood pines as a danger to human life and property because of falling branches. One interviewee reveals the difficulties of developing a strategy to reflect the diverse understandings of Norfolk Island Pines displayed by the Island community:

*It's really polar. You find a lot of the decisions on the Island are very black and white. With the pines, people want none of them to be removed and on the other hand people want all of them to be removed. I think the best way to come up with a balanced decision on that .. I think to listen to both sides of the argument and come up with potentially a middle ground. I don't like sitting on the fence but I think there is an opportunity to listen to the concerns of those people that don't want any cut and there's fear there that the Board has probably created in the past but they essentially want those trees that are of heritage value protected and are fearful that the Board's going to cut down all of them, so they're sticking to their guns. But if we go through and identify those trees that have heritage value and commit to their protection I think we can build that trust back. So that's what I'm trying to do as a first step, but then secondly identify those that*

*are self sown, that are weed,s and commence a removal of those trees. Those ones that are a little bit grey in the middle, we can work on later.*

Gary (Environmental manager, male, 40s, interviewee's office, semi-structured interview, May 2011).

The interviewee expresses the difficulties associated with managing the environment when acknowledging both cultural and natural values. The interviewee recognises the problem of past management processes that did not recognise residents' knowledge. He notes how fashioning plants and animals in 'back and white' terms has resulted in historical conflicts between the 'Board' and the community. He explains that these past conflicts now linger, creating distrust between environmental managers and some Island residents.

However, he also talks about a very productive process of negotiation whereby Island residents are involved in identifying pines of heritage value. Such a process was necessary to identify the '*middle ground*' between residents' knowledge and environmental managers' knowledge of caring for the Island. He recognises those pines with heritage value as distinct from others that are described as '*self sown weeds*'. Furthermore, he acknowledges shades of '*grey*' in decision making, where the cultural and natural values of Norfolk Island Pines cannot be separated from one another.

Conflicts about Norfolk Island Pines present the divergent knowledges of caring that exist on the Island – residents are attached to the meaning underlying the planting of the trees rather than tree ecology. In contrast to the decision-making process which led to restricted access to Mount Lidgbird, this case study illustrates how a decision-making process that involves different types of knowledge may help achieve environmental management goals.

## 5.8 Fish Feeding at Ned's Beach

While it is clear that Island residents hold considerable knowledge about the Island, there are also circumstances where traditional Island practices can unintentionally harm the plants and animals of the Island. For example, fish feeding has been practiced on Ned's Beach for generations. This Island practice involves particular Island residents feeding a variety of fish close to shore. Fish feeding at Ned's Beach has developed into a tourist attraction on the Island. In the past, various guesthouses supplied visitors with stale bread to feed the fish. Currently, under the *Lord Howe Island Marine Parks Zoning Plan*, Island residents are permitted to feed the fish at Ned's Beach 300 grams per person of bread per day. In addition, there is one tourist operator who is permitted to feed the fish at Ned's Beach Special Purpose Zone up to 5 kg of approved food each day.

Environmental science research shows how feeding animals as a tourist attraction can have detrimental effects on their health and behaviour including: aggression towards people; interspecies aggression; alteration of natural behavioural patterns; transmission of some human diseases and infections; water contamination by provisioned food; and direct injury or death through human actions (Brookhouse 2011, Semeniuk and Rothley 2008).

Interviews showed that environmental managers have approached the issue of fish feeding at Ned's Beach through a process of negotiation with Island residents in order to reduce the impacts of this traditional Island practice on fish. This process involved recent honours research facilitated by Marine Park Officers which has examined the impacts of fish feeding at Ned's Beach on the health of Kingfish (Brookhouse, 2011). This research found that frequent fish feeding at Ned's Beach has resulted in various behavioural and health impacts to the fish, which appear to be constantly inhabiting shallow waters and staying in close proximity to the feeding area. Recommendations for the management of fish feeding at Ned's Beach resulting from this research include: providing information to visitors at the site through the use of signage and brochures, and implementing food restrictions and regulations, including introducing fish feeding pellets as an alternative to bread.

This management decision allows Island residents to continue to undertake the activity of fish feeding on the Island. Rather than stopping the traditional practices altogether, residents are able to feed the fish using a more appropriate food source. Hence, the management process is one of negotiation that recognises the importance of Island resident's knowledge of caring for the Island as well as environmental managers.

## 5.9 Proposed Rodent Eradication Program

It is believed that rats arrived on Lord Howe Island in 1918, after they escaped from the offloaded cargo and bilge of the Burns Philip Steamer *Makambo*, which struck a submerged rock off the Island (Nichols, 2006). Since then this introduced species has had significant environmental impact, with negative effects on the Island's unique flora and fauna, as well as causing considerable economic loss to the kentia palm industry. The presence of rats also has implications for the tourist industry because of the potential impact on the Island's World Heritage listed natural values (Oppel et al 2010) (see Figure 5.1).

Currently rat and mice populations are controlled on the Island by an ongoing baiting programme which uses two poisons - warfarin and brodifacoum. This program is costly and poison baits only cover 10 % of the Island. There are also concerns that the prolonged use of poisons may cause rodent populations to develop resistance. If this occurs large populations of rodents will make eradication impossible (Lord Howe Island Board 2009).

In 2009 a draft rodent eradication plan was put forward by the Lord Howe Island Board, which proposes to eradicate rats and mice from the Lord Howe Island Group. The proposed eradication program involves distributing poison baits by aerial and hand broadcasting methods to all parts of the Island Group (except for Ball's Pyramid and associated islets) in a 100 day baiting operation (Lord Howe Island Board 2009). Although programs have been carried out on other islands around the world, Lord Howe Island will be the largest permanently inhabited island on which such an eradication operation has occurred (Lord Howe Island Board 2009).

Although most Island residents dislike rodents and sharing the Island with them, most interviewees talked about preferring to live with rats because they feared the repercussions of this program. Specifically, they questioned the implications of rat poisoning for the marine life and bird species, the health and wellbeing of Islanders, and the future of the tourism industry. Endemic bird species that are at risk of ingesting baits, include the Lord Howe Island Woodhen and Currawong. To protect these bird species, the program proposes to hold a substantial

proportion of each population in captivity on the Island for the duration of the baiting operation. However, the plan acknowledges that some deaths of non-target species will occur (Lord Howe Island Board, 2009).

The proposed rodent eradication program is highly controversial on the Island. Most Island residents in this study spoke of their opposition to it. Some interviewees described it as a '*death sentence to the Island people*'. Indeed, some residents have formed a '*Concerned Citizens Group*' and produced a leaflet detailing their concerns (Figure 5.3 and Figure 5.4).

Some older residents argue that rat populations have not reached the plague proportions that environmental managers talk about. However, environmental managers respond to this by arguing that residents are not aware of the large populations of rats that exist within the Permanent Park Preserve because the Settlement Area is baited. One interviewee told of her dismay at finding pamphlets and posters displayed in the museum informing visitors about the proposed rodent eradication operation. The Lord Howe Island Board, in conjunction with some Island residents, created these pamphlets, which use images as well as words to illustrate the negative ecological impacts of rats and the benefits of the proposed rodent eradication (see Figure 5.1 and 5.2). The museum is a community facility for residents and visitors that displays the Island's cultural and natural heritage. Hence, for most Island residents, the museum is a place of pride. The interviewee was clearly offended by the exhibition of these pamphlets at the museum because she perceived it as an attempt by the Lord Howe Island Board to get support from tourists for the eradication operation.



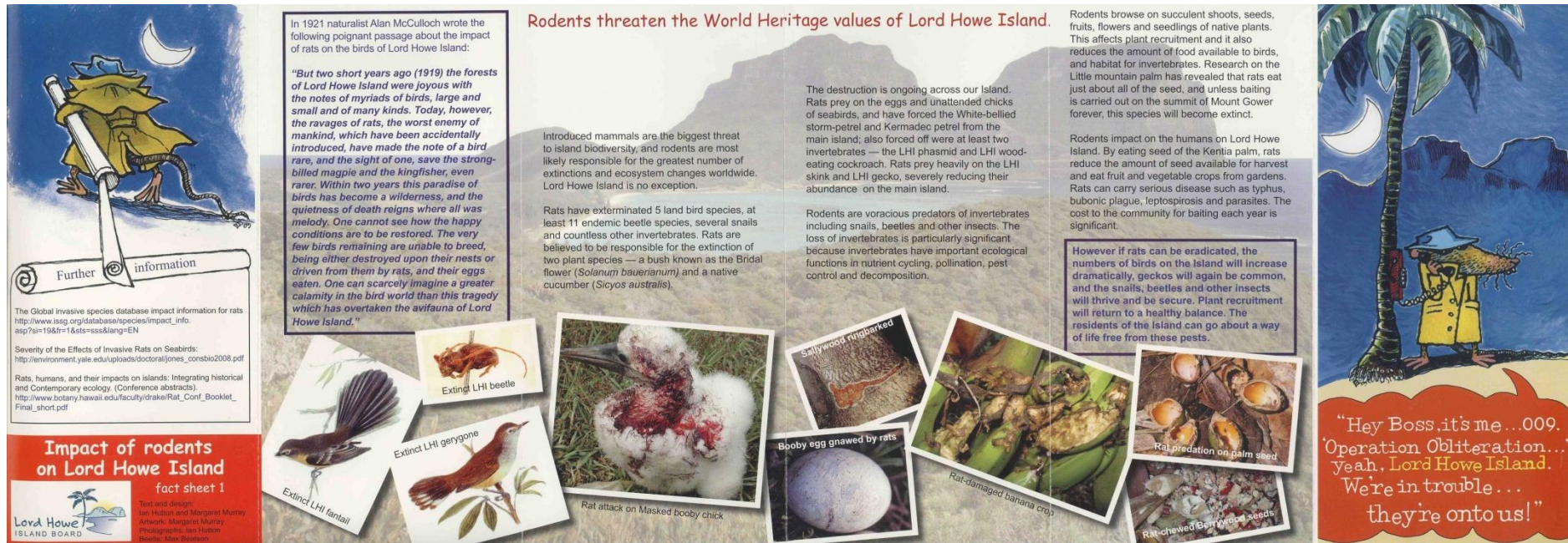


Figure 5.1 : Front side of Lord Howe Island Board Rodent Pamphlet 'Fact Sheet 1', designed by the Lord Howe Island Board in conjunction with several residents which describes the detrimental impacts of rodents on the Island ecosystem and hence, the reasons why rodents should be eradicated from the Island.

Source: Lord Howe Island Board



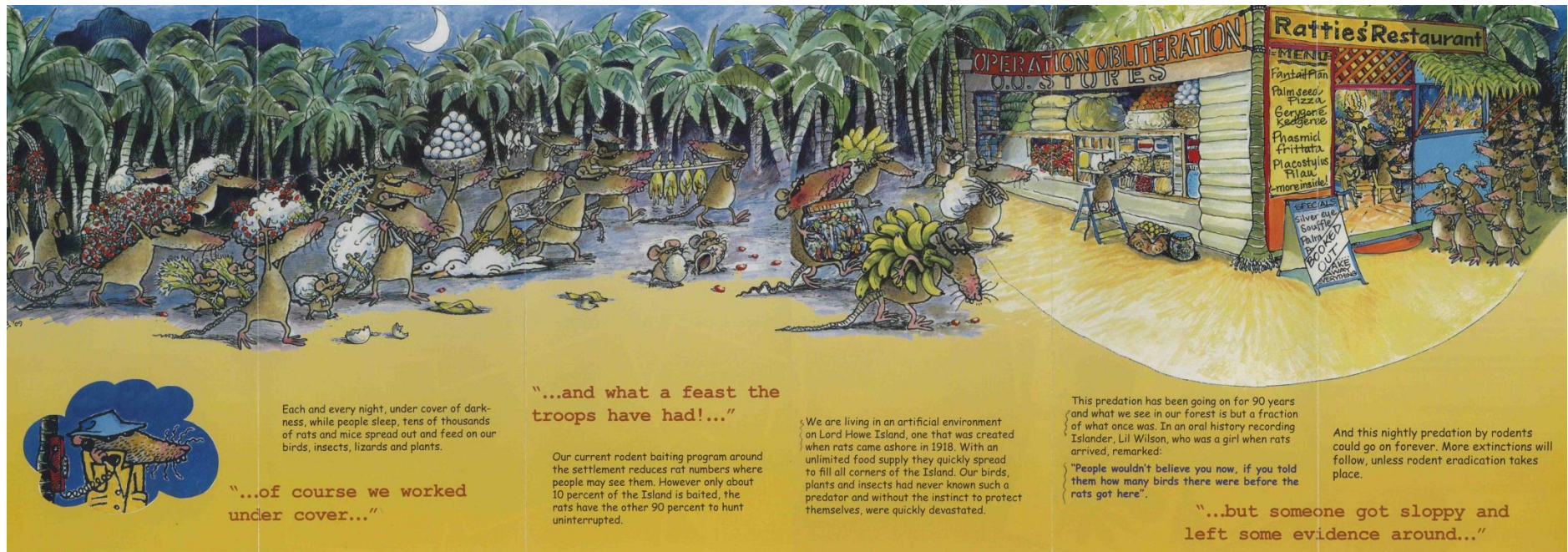


Figure 5.2: Back side of Lord Howe Island Board Rodent Eradication Pamphlet ‘Fact Sheet 1’. Illustrations showing the detrimental impacts of rats on the Island ecosystem. Designed by the Lord Howe Island Board in conjunction with several residents. Illustrations by an Island resident.

Source: Lord Howe Island Board

## Concerned Citizens Group



*Regular supplies approach the island providing potential rodent transport across the "moat".*

*A group of concerned citizens has been formed in response to methods proposed for rat eradication on Lord Howe Island. Although we would like to see the rats and mice removed we do not believe that this should be at the expense of other organisms on the island.*

### *You can help*

*You can express your views by contacting:*

*The Hon. Carmel Tebbutt  
Minister for Climate Change  
[dp.office@tebbutt.minister.nsw.gov.au](mailto:dp.office@tebbutt.minister.nsw.gov.au)*

*The Hon. Peter Besseling  
Member for Port Macquarie  
[electorateoffice.portmacquarie@parliament.nsw.gov.au](mailto:electorateoffice.portmacquarie@parliament.nsw.gov.au)*

*The Hon. Peter Garrett  
Minister for Environment, Heritage and Arts  
PO Box 249  
Maroubra 2035*

*The Hon. Tanya Plibersek  
111-117 Devonshire st  
Surrey Hills 2010*

## CONCERNED CITIZENS GROUP

Ensuring that World Heritage is not compromised by rodent eradication methods

## Concerned Citizens Group

*Ensuring World Heritage is not compromised by rodent eradication methods*



## Lord Howe Island

Figure 5.3: Front side of Concerned Citizens Group pamphlet concerning the proposed rat eradication program.

Source: Concerned Citizens Group, Lord Howe Island



## Widespread poisoning on World Heritage Listed Lord Howe Island

### Poisoning paradise

In a radical new approach to rodent eradication the Lord Howe Island Board proposes to drop some 60 tonnes of rat poison pellets onto the island using helicopters and hand distribution methods.

However, this method will kill non-target species.

A public meeting of residents has been told that "any mortality (would be) at an individual rather than (a) population level" when referring to non-target deaths. Translated this means that animals other than the rats and mice will be killed by the poison when applied using this method.

### Fending for themselves

Our rare and unique woodhens and currawongs will be collected prior to the poisoning and placed into protective custody but all other species will "have to fend for themselves". Previously woodhens died when "protected" this way.

These other species include 241 native plant species, 182 bird species, 1600

terrestrial invertebrates plus the many fish and coral species.

Lord Howe relies on its reputation for pristine environment and World Heritage to attract tourists. Dropping 60 tonnes of a poison that will cause widespread deaths in non-target species is counter-productive and puts at risk the World Heritage environment on the island and human wellbeing and safety.

The proposed poison, brodifacoum (Pest Off), is banned from such distribution in all Australian states. Such distribution poses threats to non-target species such as birds and can result in poisoning of soil microorganisms and contamination of streams and surrounding waters.

### Will the proposed process remove the rats and mice?

Trials performed on small, uninhabited islands have shown some success. However, recent scientific research has shown serious gaps in knowledge. Experts have questioned the use of wide broadcast of rat baits as a method of rodent control on the very islands cited as models for the Lord Howe experiment.

### Stretching the imagination

Proponents of the eradication assume that if you could get rid of the rodents then the "600km moat" that separates Lord Howe from the mainland would prevent further re-infestation.

It takes an enormous stretch of the imagination to assume that vessels, packing containers and aircraft entering the island will not re-introduce rats and mice from time to time. The moat is not 600km wide but simply the closest any aircraft, packing case or boat gets to the island.

Yes, improved security is proposed for the trading vessels arriving at the island but rat security is still reduced to human vigilance vs. a rat's cunning.

Until recently the Lord Howe Island Board ran a very effective rodent control program using bait stations. These bait stations were maintained to the poison manufacturer's specifications and did not harm non-target species. Recently the Board reduced station maintenance to just one cup of poison per station per 10 weeks. The current "rodent emergency" resulted from this action.

Figure 5.4: Back side of Concerned Citizens Group pamphlet concerning the proposed rat eradication program.  
Source: Concerned Citizens Group, Lord Howe Island

Uncertainty surrounding the proposed rat eradication program has become a source of conflict. As one resident commented:

*Yeah yeah it's mad, they're mad and they have just no idea whether it will work or not. And they have so many things that they say: 'oh and it can't rain for two weeks', and Lord Howe's not really like that, it rains a fair bit. And.. they say 'oh well we'll catch enough birds so that we can rebreed them, and you think you just don't care that you're going to kill thousands of birds, like they're all going to die and have a horrible death, all in the name of the greater good..*

Sarah (Islander descendant, female, 30s, interviewee's home, semi-structured interview over a cup of tea).

This interviewee perceives the rodent eradication as '*mad*'. Her knowledge of caring for the Island is intimately linked to her lived experiences. She recognises the agency of the Island, stating that the Island's natural forces cannot be controlled: '*they say: 'oh and it can't rain for two weeks' and Lord Howe's not really like that, it rains a fair bit*'. The interviewee argues that the deaths of individual birds are not acceptable, even if the species will survive. These practises do not correspond with her understanding of caring for the Island.

In contrast to some residents, environmental managers understand the rat eradication as an opportunity to rid the Island of rats, which, they argue, are destroying the Island ecosystem:

*I just cannot understand why there's so much opposition to the rodent [eradication program]. I can because I've been overseeing that project, I'm heavily involved with it, but the impact that they're having .. We bait five times a year. We're already putting poison out in the environment .. I've got to smell dead rats around my property five times a year. I prefer to just do it once, have a big smell and get it over and done with it .. The mice are already immune to warfarin, and if we over-bait with warfarin rats will become immune, but we don't we have a strict baiting schedule. We've*

*brought in a new poison now, similar to warfarin, but a different style of bait and that's to reduce the immunity. Lot's of people do use the bait we're going to use for aerial eradication which is brodifucum which you can buy from Joy's shop as talon, and we're already getting owls, woodhens come in poisoned from eating poisoned rodents. So the impacts are there. The impacts of rodents on the environment are overwhelmingly documented. They eat a huge amount of seed, which if they're not there it will germinate. They target certain species, things that they like, so certain species are disadvantaged.*

Ray (environmental manager, male, 30s, Lord Howe Island Board Offices, semi-structured interview, May 2011).

This interviewee uses the language of science to describe the benefits of the eradication program for the Island. He understands the Island in terms of ecosystems and species populations and is not concerned about the death of individual organisms. For him, the current baiting program that controls rats on the Island is as much, if not more, detrimental to the Island.

Environmental managers need the whole community to support the rodent eradication program in order to carry out the operation to eradicate rats from the Island. Interviews revealed that although environmental managers had gone to a lot of effort to ensure that the science informing the proposed rodent eradication plan was seamless, it was the *process* through which this scientific knowledge was acquired and then communicated that had led to opposition towards the plan within the community:

*From my point of view the actual eradication itself is – it's a challenge technically but it's not the greatest – the greatest challenge is the community.. There are people there who say we must do it and we.. must do it now; there are people there who say there's no issue there's no problem and the majority in the middle are, yeah it would be great to get rid of the rats, it would be a really good thing to do. Its complex I know .. I hear what they're saying.. I think our greatest challenge is .. to engage with the community and I think the biggest issue with the rat eradication was that ..*

*people said, 'oh it would be good to get rid of rats'. The Board went away, did all this work and said here's the answer and that was very confronting for the community. They weren't part of the solution and now we're.. almost back tracking .. we're almost having to go back to the beginning.*

Chief Executive Officer, Lord Howe Island Board (interviewee's office, semi-structured interview, May 2011).

This interviewee acknowledges that processes of environmental decision-making on the Island need to '*engage with the community*'. Social hierarchies on the Island, discussed in Chapter Four, position environmental managers as having a greater decision-making capacity than Island residents in terms of caring for the Island. This is contentious for some Island residents, particularly Islander descendants who base their knowledge of caring for the Island on lived experiences and perceive environmental managers as 'outsiders' applying 'mainland' management decisions to the Island. Most environmental managers on the Island are aware of this, as an interviewee explains:

*The reason why the rodent eradication project didn't go smoothly to date and why there's been so much opposition is that bunch of outsiders said: 'this works. it's worked on all these other Islands, we know the impacts, we know the issues, rahrahh. The Islanders just didn't buy it. They need to be part of the decision making, they don't want decisions made for them. So using that project as an example, I would have got professional facilitators to come in, run workshops where you ask people to look at issues and solutions, try and get them to come up with the answers, so bring them along ... People love to kick governments, it's an Australian sport and rightly so... You know I don't blame people for having a go. So with the weeds project. when we came in, Pamela and I, we've got an infinite knowledge of how to deal with landscape weed issue, same weeds, same sort of plant communities, doing it quick, efficiently, with minimum impact. Coming here we said we want to bring those methods in. They said nup, so you have to bring them along. It took us a year longer than what we wanted to actually*

*deliver some outcomes, so I think there needs to be a community participation*

Ray (environmental manager, male, 30s, Lord Howe Island Board Offices, semi-structured interview, May 2011).

Again, this interviewee recognises that the proposed rat eradication program has met with resistance from the community because it did not involve residents in the *process* of decision-making. He recognises social hierarchies that operate on the Island and position '*outsiders*' as not having the authority to speak for the Island. Environmental managers gain their authority to speak for the Island through the knowledge of science and their official positions on the Island. However as this case study shows, though the science informing this environmental management decision may be valid, the process of developing the environmental management '*solution*' for the Island needs input from Island residents for it to be accepted. As an '*outsider*', the interviewee talks about learning cultural protocols on the Island. He comments that it took some time for him to learn that '*you have to bring them [the Island community] along*'.

## **5.10 Conclusion**

The aim of this chapter was to use a number of case studies to explore points of contention that emerge between Island residents and environmental managers, to illustrate what the conflicts are about and why they occur. It is evident that conflicts between Island residents and environmental managers occur because of the diverse knowledges of caring that inform different ideas about what should be protected and what belongs, and does not belong, on the Island. While residents' knowledge of caring for the Island is drawn substantially from their lived experience of the Island (Harrington 2004) and notions of islandness that value self reliance (Jackson 2006, Stratford 2008) environmental managers' knowledge of caring is based primarily on rational and scientific discourses of islandness (Dodds and Royle 2003, Kueffer et al 2010) and nativeness (Head and Muir 2007).

In some cases it is clear that introduced and native species such as Cherry Guava, Bush Lemons and Sooty Terns have had both practical and symbolic roles in



sustaining the Island way-of-life and Island identity. However, decision-making processes concerning the management of the Island often overlook these aspects of intangible cultural heritage (Truscott 2000, Harrington 2004, 2009, Kato 2006, Bade 2010). Equally, the case of fish-feeding indicates what science can bring to intangible cultural heritage practices. In this case, through a process of negotiation all parties involved in fish feeding could work together to better understand how to manage the fish in a way that improved the health of the fish, but allowed fish feeding by visitors to continue.

In the case of the proposed rat poisoning program, the *process* of environmental management, rather than questioning scientific validity lead to conflict between environmental managers and residents on the Island. Environmental managers acknowledge that community opposition was an outcome of the decision-making process that did not engage with Island residents and recognise their knowledges of caring (Waitt et al 2009, Gill et al 2009). In the case of Norfolk Island Pines, some environmental managers talked in positive terms about a process of negotiation whereby Island residents are practically involved in the decision-making process through facilitating residents to identify Norfolk pines of cultural value. The theme of the next chapter is how such a process of cooperation and negotiation through the World Heritage framework can facilitate environmental management.

## Chapter Six: World Heritage



People taking photos of the Island from the summit of Mount Gower

### 6.1 Introduction

The World Heritage designation of the Lord Howe Island Group took place in 1982. As discussed in Chapter Two, the concept of World Heritage has changed significantly over its 40-year history. These changes have included:

- the recognition of World Heritage that comprises both ‘natural’ and ‘cultural’ values;
- the inclusion of the category of ‘associative cultural landscapes’ (Head 2000, Rossler 2003);
- the recognition of ‘local’ and Indigenous intangible heritage values, including spirituality and emotional attachment (Sullivan, 2003) and the acceptance of ‘living heritage’ (Truscott 2000);
- the maintenance of biological diversity through cultural diversity through the inclusion of traditional management practices in the identification, protection and management (Rossler, 2003).

Yet these changes do not consistently and adequately inform management decisions on Lord Howe Island. Environmental management of Lord Howe Island as a World Heritage property still privileges scientific knowledge over all other types of knowledge. In this context, the aim of this chapter is to explore whether World Heritage could provide a platform where the process of environmental management could be revisited to acknowledge how different perspectives on care may work together in the identification, protection and management of the Island. To do so, this chapter examines the sets of ideas that inform the World Heritage talk on Lord Howe Island. Similar to Chapter 4, the interpretation of how Island residents talk about World Heritage is divided into two sections according to residents' official capacity to make management decisions – the relatively disempowered Island residents and the relatively empowered environmental managers.

## **6.2 Island Residents' Talk of World Heritage**

### **6.2.1 As a Divisive Force in Environmental Management: 'Too much Red Tape and Too Much Bureaucracy'**

Those Islanders who talked of the World Heritage designation in terms of 'increased restrictions' were least mobilised to care for the Island through this platform. Interviewees spoke about the Island before the designation as '*more laid back*' with far fewer rules to abide by. Some spoke of World Heritage governance as 'taking away' their freedom and ability to make choices:

*The only thing that is frustrating for me is there's so many restrictions now placed on locals on what they can and can't do through admin and control that is kinda taking away... Everything has to be permitted now, it has to be regulated and in that respect you've lost your freedom.*

Peter (Islander descendant, male, 30s, interviewee's business premises, semi-structured interview, May 2011)

Ideas of birthright inform this person's rights as a 'local' on the Island. He talks about management '*taking away*' his '*freedom*' and reveals a sense of loss of control in terms of caring for the Island. He talks about regulations and permits restricting the Island way-of-life and how he practices his identity as an Islander

descendant. This quotation reveals how processes of 'border control' discussed in Chapter Four operate to constrain humans as well as plants and animals on the Island. This bordering process forces Island residents to negotiate various restrictions and regulations that interfere with how they carry out their everyday lives on the Island. This is one example of how management practices informed solely by discourses of abstract rational science work against mobilising islanders to work with environmental managers. At the same time, contemporary concepts of World Heritage such as 'cultural landscapes', 'intangible cultural heritage' and hybrid understandings of space would enable this person's emotional attachment and lived experiences to become an integral part of the decision-making process.

The concepts of 'cultural landscapes' and 'intangible heritage' resonate with Island residents, who strongly believe that the early settlers, and their descendants, have played a crucial role in maintaining the Island as 'pristine'. For example an interviewee stated:

*They actually made the Island what it is today. There may be some criticism on weeds and things that have been brought in, but the Island has been maintained up to this stage in a pretty pristine state and I think it's all out to them that actually began it..*

Bob (Islander descendant, male, 50s, interviewer's accommodation, semi-structured interview, May 2011)

While this interviewee acknowledges that his ancestors may have been responsible for bringing in 'weeds', he argues that Islander descendants have cared responsibly for the Island. The natural values of the Island are attributed to the stewardship of Islanders, not environmental managers. This interviewee was not alone in identifying early settlers and their descendants as shaping the Island into what it resembles today– an Island of World Heritage value.

Thus, for some Island residents, particularly Islander descendants, World Heritage valuation that relies on outside expert knowledge is spoken about as a threat to the Island and the Island way-of-life. World Heritage environmental

management is understood as imposed from above, and from outside, interfering with how Islander descendants have cared for this place for generations:

*World Heritage listing came in 1982 and the only reason it did was because the Island was in pretty good shape. Now how did it get to being in such good shape? We were doing a pretty good job and we don't need all this bloody help from offshore to get where we are and in my view in many instances they're doing more harm than good. They just won't listen to local information and the community suffers.*

Greg (Islander descendant, male, 70s, interviewee's home, semi-structured interview, May 2011)

This quotation indicates that some Islander descendants are not mobilised to work within the World Heritage framework because they understand that their voice is not heard by managers, who are positioned as 'experts' and 'outsiders'. The important point is that the World Heritage listing of Lord Howe Island, framed as 'natural heritage,' has generated a division along binary lines. Regardless of the structure of management, World Heritage sustains an understanding of environmental decision-making as being in the control of environmental managers who are typically perceived as non-residents, short-term, 'mainlanders', whose knowledge of caring for the Island is informed by abstract scientific notions of *islandness* rather than historical Islander discourses of *islandness*. In this scientific designation there is no acknowledgment of how Islander descendants have made decisions about how to care for the Island based on embodied understandings of *islandness* that value self-reliance, self-sufficiency and co-operation. Consequently, some interviewees showed resentment towards the regulations and restrictions layered over the Island that dictate their everyday lives. Interviews with Islander descendants reveal that they feel disempowered and locked out of management processes and they believe that their knowledge of caring – that played such a crucial role in facilitating the World Heritage designation of the Island - is undervalued.

### 6.2.2 Preserving, Conserving and Privileging Nature

World Heritage played out in the lives of participants particularly in terms of building approvals because of environmental restrictions related to threatened species and vegetation. When asked whether World Heritage designation affected her everyday life an interviewee responded:

*Yes indeed it has.. I've had a meeting this morning with people from the administration and we're trying to have commonsense prevail in relation to a shed plus studio that we've built and had approval to build and.. This is probably a mixture of the administration of the Act distinct from the World Heritage listing although it's people that are administering the Act who are here as environmental people so it's the environmental people who are making the decision on your everyday life and that's where the issue arises. So whatever I'm talking about is related to the Lord Howe Island Act but that's administered by people who are here because of World Heritage listing so in essence they don't have the expertise that's required. So that's where the difficulty arises everybody in the administrations employed by the Department of the Environment.. But the people here are all appointed in that capacity to look after the environment, there not here to look after the needs of people on Lord Howe Island, so it does affect your everyday life.*

Julianne (Islander descendant, female, 80s, interviewee's home, semi-structured interview over tea, May 2011)

This person understands that the Island administration is being run by environmental managers. In turn, caring for the natural values of the Island trumps any possibility of acknowledging the social 'needs' of the Island community.

Island residents also spoke of their resentment of the privileging of the natural over the cultural landscape and intangible heritage of the island. As one interviewee explained:

*The Board in particular has really been pushed heavily towards environmental conservation, which is a good thing but it's an unbalanced approach. It has come at the cost of the Island's cultural heritage and the Island's got quite a rich cultural heritage but that really isn't spoken about very much and it's not something that receives much publicity. When you see Lord Howe Island advertised it's like come and see beautiful Lord Howe Island. Experience World Heritage environment full stop. That I really think is a shame .. You speak to a lot of the older locals you'll probably get this feeling that quite a lot of them feel disenfranchised. They feel that that aspect has been neglected to the detriment because .. you have a vibrant community. It's not just a natural environment there's also a human element and that human element tends to be suppressed and pushed aside a little bit because it's not perceived to be as important as the natural values. That's my take on it.*

Matthew (Islander by law, male, 40s, picnic table overlooking the lagoon, semi-structured interview, May 2011)

This participant notes how the '*human element*' is just as important as conserving the natural values. As highlighted by the respondent, Island people often feel '*disenfranchised*' because the cultural values of the Island have not been recognised by the designation. How the privileging of natural values, 'set in stone' by the World Heritage designation, filter down through different levels of legislation have implications on the everyday lives of residents. The priority of 'natural' over cultural heritage is viewed by many residents as an '*unbalanced*' approach.

Some Island residents suggested that some environmental managers think humans do not belong on the Island. When asked what threatens the Island, an interviewee responded:

*The threats are for the government just to come in and buy everybody out and just give it back to the birds. I think that's what they want eventually, everybody to go.*

Ken (Islander by law, male, 70s, interviewee's home, semi-structured interview, May 2011)

For some Island residents the environmental management focus on 'the environment' will result in a plan to 'eradicate' people and give the Island 'back to the birds'. The point to emphasise is that the privileging of natural values over the cultural landscape and intangible heritage in the World Heritage designation some 30 years ago, and subsequent management plans, has disenfranchised many Island residents.

### **6.2.3 As a Mobilising Force for Environmental Management**

Yet World Heritage designation is also important for mobilising some Islander residents both individually and collectively in the process of environmental management. For some participants, the World Heritage designation heightened awareness of the unique qualities of the Island and encouraged a sense of responsibility to *share* their home with the rest of the world. Consequently, in order to share this incredibly meaningful place with others, World Heritage provides a mechanism through which to reflect upon new management practices and different ways of caring for the Island. When asked whether World Heritage has changed the Island way-of-life an interviewee commented:

*I suppose it has made changes. It has put restrictions on certain activities; where people can go and what they can do but I guess it's also made us much more aware of what the Island is and we should value it. It's not just for us and I think that sometimes has been the way people have thought of the Island. But I think a lot of people who have been here a long time just think of it as theirs - we can do it our way - and I think this has made it we can't do it necessarily our way, we've got to share it with lots of other people. I think we've got to be careful how it's shared. You know you get too many people here, you know all the walks. They've got the board walks and things like that which they've had to do because of the number of people traipsing up and keeps people on the straight and narrow rather than having people dashing off through the bush, cause I know as kids we all used*



*to go just make our way up any way and everywhere but probably do lot's of terrible things that would be frowned upon now.*

Marie (Islander descendant, female, 80s, interviewee's home, semi-structured interview over afternoon tea, May 2011)

This person talked of World Heritage in terms of mobilising a sense of 'sharing' the Island with other people – 'outsiders' who lack the appropriate knowledge of caring for the Island. The Island is an incredibly meaningful place to all Island residents. She draws on concepts of ownership and birthrights to explain Islander descendants' understandings of their connection to the Island stating, *'I think a lot of people who have been here a long time just think of it as theirs - we can do it our way'*. As the interviewee states, *'we need to be careful how it is shared'* - she interprets regulations enforced by environmental managers as a way to control visitors or 'outsiders' that have no knowledge of how to care for the Island.

For other residents, the way in which World Heritage designation became a mobilising force was tied closely to discourses of distinction, branding and uniqueness. Various interviewees expressed with pride how World Heritage designation confirmed the special status of this place. For example,

*I just think it's wonderful to say that I'm living on an Island which is World Heritage and when I'm away on holiday I proudly proclaim that and say how wonderful it is.*

Kate (non-Islander, female, 50s, Lord Howe Island Museum, semi-structured interview, May 2011)

This person draws on discourses of distinction and uniqueness that inform her understanding of living on a World Heritage Island as an honour.

World Heritage status, is equally understood by many Island residents as crucial to the branding of the Island as a tourism destination. Interviewees spoke about World Heritage as an important tourist *'label'*, *'drawcard'* and *'badge'*.

Interestingly although tourism was discussed in regards to World Heritage attracting tourists to the Island, there was no theme of residents wanting to stop

or control the tourists coming to the Island. As discussed in Chapter One, the reason for this is perhaps because tourism has been an integral part of the Island way-of-life since the 1930s and crucial to the Island economy.

## **6.3 Environmental Managers Talk of World Heritage**

### **6.3.1 World Heritage: An International Obligation**

Environmental managers talked about World Heritage as an international mobilising force for sustainability that secures the Island for future generations:

*People have an incredible affection for this place after a short time and I think through that, World Heritage listing, it shows that we have a responsibility to keep that for the future. But then again I think the Island people do that .. because the controls that are here they want them. They know the Island wasn't clear-felled by the early settlers for whatever reasons but the reason that eighty percent of the Island is natural vegetation is because they didn't destroy their own environment. And I can see where some tensions can come in from local people because they say we managed it fine for generations and we say yep you did but now we're just reinforcing what you've been doing. And it's again that we need to engage with them that we're continuing to do with them what they've always done and the World Heritage it's a great thing up there but yeah I don't think it.. I mean they're doing what they've always done it's just that there's a law now saying that you can't do what you didn't do. Any way that's my view.*

Chief Executive Officer, Lord Howe Island Board (semi-structured interview, interviewee's office, May 2011)

This interviewee suggests that the increasing regulation on Lord Howe reflects broader processes in Australian society – all communities have far more regulation now than in the past. The interviewee understands environmental regulations as simply formalising what Islanders have always done. In his words, *'they're doing what they've always done its just that there's a law now saying that you can't do what you didn't do.* This environmental manager understands that Islanders care for the Island. Yet, what this environmental

manager does not grasp is the importance of the knowledge system that informs how Islander descendants care for the Island, and how the *process* of regulation at present is understood by many Islanders to lock them out of decisions on how to care for the Island.

Environmental managers, like Island residents, understand World Heritage as giving the Island international status:

*What it [World Heritage] might do is raise more of a global perspective on Lord Howe Island so maybe more scrutiny coming from external rather than just immediately local. So maybe that could be a challenge for some people - that there is more of a focus on Lord Howe Island.*

Pamela (environmental manager, female, 30s, interviewee's office, semi-structured interview, May 2011)

Again, environmental managers like Island residents understand World Heritage designation as an impetus for environmental management practices. However, the language of environmental managers points to how natural values are prioritised in their understanding of World Heritage as a mobilising force:

*The [natural] values identified in World Heritage protect the Island and they drive programs.. agendas.. There is a strong focus on restoring the Island because of its World Heritage listing. Prior to World Heritage listing they controlled rats because they affected the palm industry. There wasn't a focus on eradicating them because they affected the biodiversity. It was only until they eradicated cats and pigs prior to World Heritage listing because they were affecting the woodhen and the Islanders realised oh its an issue and it was about that time that the Island got listed.. About ten years after the listing the goats got eradicated .. There's three nannies out in the hill we're just waiting for them to die of old age .. so there's been a definite change in focus and that's my job.*

Ray (environmental manager, interviewee's office, semi-structured interview, May 2011)

We learn in this quotation how World Heritage is a mobilising force underpinning environmental management decisions informed by scientific discourses. For this environmental manager, the World Heritage designation of the Island's natural values is understood as driving environmental 'agendas' and 'programs' that privilege environmental managers' knowledges of caring for the Island.

## **6.4 World Heritage as a Mechanism for Change**

Both Islander residents and environmental managers agree that the Lord Howe Island Group should be designated as a World Heritage site because of its special attributes. Where tensions arise is how World Heritage designation is locked into particular management practices that are 30 years old and that prioritise 'natural values' (Carter 2010). Environmental managers understand the designation as an international obligation and an impetus for environmental management agendas that value scientific discourses of *islandness*. Case studies illustrate (see Chapter Five) how some conflicts arise because environmental management strategies do not adequately acknowledge the cultural landscape and associated intangible cultural heritage values (Truscott 2000, Kato 2006, Harrington 2004, 2009). Equally, other conflicts arise because some Island residents too quickly dismiss scientific knowledge as imposed from 'outside' and 'above'. Some Islanders understand World Heritage as a management process that locks out their involvement and knowledge in the environmental management decision mix. In sum, some residents argue that the World Heritage designation of the Island's natural values devalues the cultural dimensions of the Island that are essential to sustaining the Island-way-of-life and Islander identity (Truscott 2000, Harrington 2004, 2009).

World Heritage itself may offer a practical platform where these conflicts can be resolved, as discussed in Chapter Two. Contemporary definitions of World Heritage embrace the importance of the concepts of natural values, intangible heritage and cultural landscapes (Head 2000, Fowler 2002, Rossler 2000, 2003, 2009). If the concepts of intangible heritage and cultural landscape were integrated into the designation of Lord Howe Island as a World Heritage designated site, then *the process* by which environmental decisions occur would

need to be revisited. No longer, could privilege be given to 'natural values'. Cultural landscapes would be an integral part of the knowledge on which decisions were made. Equally, if management was conceived as an open process of consultation, where 'natural values' and 'cultural values' were given equal footing, scientific knowledge could not be quickly dismissed by Islanders as irrelevant to an Island way-of-life.

Environmental managers themselves acknowledged that environmental management conflicts arise because of the *process* (see Chapter Five). Most case studies discussed in Chapter Five illustrate that conflicts in relation to the management of the Island rarely involve Island residents disputing scientific knowledge. Rather, conflict occurs because some management processes, in attempting to resolve a problem, exclude Island residents and their knowledge of caring for the Island. Furthermore, there are instances, such as issues relating to the removal of Norfolk Island Pines, when environmental managers acknowledge that cultural and natural values cannot be separated from one another and hence speak of shades of *grey* in decision-making. This is an example of an environmental manager acknowledging cultural protocols on the Island that value face-to-face communication and participation (see Chapter Three). Another environmental manager talked about walking through issues and decisions that arise on the Island *together*. He acknowledged that unlike management processes on the mainland, decision-making processes on the Island need to *engage* with Island residents. Engagement lessened the amount of opposition to decisions because Islanders were a part of the process. And again there are instances such as the case of fish feeding at Ned's Beach that involved negotiating environmental managers' and Island residents' knowledge of caring to develop a solution that allowed residents to continue their traditional Island practice of fish feeding whilst taking into account scientific knowledge regarding fish health.

These results suggest a strong case for revisiting the designation of Lord Howe Island as a World Heritage site. There are already instances where World Heritage sites designated for their natural values have been reassessed to include cultural values for example, Uluru-Kata Tjuta (Truscott 2000). However,

in the case of Lord Howe Island there is evidence, particularly from the way in which environmental managers have approached the issues of the Norfolk Island Pines and fish-feeding at Ned's Beach, to suggest that we don't have to go this far. In order to bring the different knowledges of caring for the Island together, changes in the conceptualisation of World Heritage need to be embraced by current management. It is clear from this research that environmental managers do not consistently and adequately acknowledge the cultural landscape (Head 2000, Fowler 2002, Rossler 2000, 2003, 2009) and intangible cultural values (Truscott 2000, Harrington 2004, 2009) of the Island. In addition, in some cases management processes do not engage with residents and their knowledge of caring. Hence, Islanders are excluded from the management and protection of *their* heritage (Sullivan 2003). In order to help resolve conflicts over management of the Island, more recent notions of World Heritage need to be embraced. This will facilitate a process that enables the current management to understand and respond to the deeply held cultural attachments of Island residents. At the same time, Island residents will better understand that the appropriate use of science can help maintain the Island's uniqueness.

## **6.5 Conclusion**

World Heritage is a mobilising force on Lord Howe Island that is both inclusive and divisive. In some respects, the range of views on Lord Howe Island mirror the international academic debates about how the concept of World Heritage can most effectively, and equitably, be implemented (see Chapter Two). Many residents are concerned that Lord Howe Island's designation for its 'natural' values now acts to devalue the cultural dimensions of the Island. Management *processes* that privilege scientific knowledge and 'natural values' often give rise to conflict because Island residents and their knowledge of caring for the Island are both excluded. The concepts of intangible heritage and cultural landscapes that are integral to contemporary understandings of World Heritage, alongside 'natural values' (Sullivan 2003, Harrington 2004, 2009) may help resolve management conflicts. These concepts offer a platform that brings together the different types of knowledge of caring for the Island. Revisiting the World Heritage designation of the Island therefore could potentially act as a platform to

revisit the process of environmental management. To conclude the thesis, the next chapter provides a discussion of the themes uncovered by this research and outlines future research agendas.

## Chapter: Seven Conclusion



Lord Howe Island Woodhens in the backyard at Kentia

### 7.1 Summary

The aim of this chapter is to revisit the aims of this thesis and outline wider lessons for heritage management arising from this project. As outlined in Chapter One the aims are threefold:

1. To apply recent rethinking of the concept of World Heritage to assist the *processes* of environmental management on Lord Howe Island.
2. To develop appropriate geographic methodological approaches to doing island research.
3. To critically explore the nature, island and World Heritage talk of Lord Howe Island residents and environmental managers.



To address the first aim Chapter Two outlined the concepts that underpin World Heritage. This chapter discussed how World Heritage is a dynamic concept. World Heritage concepts have been greatly influenced by academic debates over culture and nature. Analysis of the literature on islands demonstrates that there is a multi-disciplinary approach to doing island studies. Attention is given to the inherent characteristics of islands such as separateness, boundedness, isolation, vulnerability and smallness and how these are interpreted through the scientific lens of island ecology. In addition, this literature highlights how the contested notion of islandness is central to geographical research on islands that explores concepts of attachment, identity and place and the relationships between people. The literature on cultures of nature reveals how the concept of nature has evolved through debates over culture and nature in cultural geography. Chapter Six discusses how the concepts of 'cultural landscape' and 'intangible heritage' provide possibilities to rethink the process of environmental management on the island through incorporating different types of knowledge that inform practices of caring for the Island.

Chapter Three addresses the second aim. This chapter outlines methodological and epistemological challenges that scholars have faced doing island research. Particular attention was given to documenting the researcher's own experiences of doing research on Lord Howe Island. The chapter reveals that in addition to critical reflexivity, a flexible mixed-method approach incorporating subtlety and nuance is most appropriate for doing island research. Flexibility is crucial because it allows the researcher to readjust methodologies according to Island protocol. Learning cultural protocol to implement this project involved engaging with an Islander descendant. This played an important role in facilitating interview recruitment and meaningful narratives. It is evident that Lord Howe Islanders prefer face-to-face methods of communication and conversational group interviews over cups of tea, dinner or lunch rather than typical one-on-one interviews. Adjusting the methodology accordingly was crucial to producing qualitative meaningful results. Interviews with environmental managers were

less influenced by Island protocols. As they had been formally advised of the research project, their involvement was not difficult to arrange.

Chapters Four, Five and Six address the third aim. Chapter Four examined the different sets of ideas that inform *how* and *why* people care for Lord Howe Island. This chapter suggested that whilst everyone agrees that Lord Howe Island is an incredibly important place worth caring for, what they care for, and how they care, draws on different knowledge making practices that bounded the Island in different ways. This chapter introduced the notion of *islandness*, defined by Jackson (2008) as qualities of islands - social, geographical or political - that are distinct from those of continents. The intersection of discourses of islandness, boundaries and nature inform different practices of caring for the Island. Importantly, Chapter Four revealed that environmental managers and Island residents not only prioritise different knowledges to justify what and how to care, but they are positioned differently in the hierarchy of environmental management decision-making, which leads to conflict in relation to the environmental management of the Island.

Chapter Five presented a range of case studies to illustrate how different knowledges of caring and social hierarchies identified in Chapter Four give rise to environmental management conflict on the Island between environmental managers and Island residents. Specifically, this chapter examined environmental management *processes* on the Island, revealing that the cultural landscape and intangible cultural heritage values of the Island were not consistently and adequately acknowledged. Significantly, this chapter illustrated that environmental management conflicts rarely involve Island residents disputing scientific knowledge. Instead, it is the management *processes* that lead to conflict between environmental managers and Island residents because these processes do not always engage with the Island community and their knowledge of caring for the Island.

Chapter Six addresses both the first and third aim by examining the sets of ideas that inform World Heritage talk of Island residents and environmental managers.

Chapter Six revealed that many residents are concerned that the designation of the Lord Howe Island Group for its 'natural' values now acts to devalue the 'cultural' dimensions of the Island that are essential to sustaining the Island-way-of-life and Islander identity. Chapter Six then addressed the first aim by putting the concepts of World Heritage discussed in Chapter Two into practice. Chapter Six argues that concepts of 'intangible heritage' and 'cultural landscapes', alongside 'natural values', may help to resolve environmental management conflicts by offering a platform to bring together the different knowledges of caring for the Island. This could facilitate a process that enables the current management to understand and respond to the deeply held cultural attachments. While, at the same time, Islanders can better understand that the appropriate use of science can help maintain the Island's uniqueness.

## **7.2 Future Research**

Following on from this research, further investigation of how current World Heritage concepts can be more effectively integrated into Lord Howe Island management processes is warranted. In addition, comparative research may uncover further implications of World Heritage listing for the environmental management of islands. At one level, this study could be replicated on islands listed exclusively for their natural values. At another level, research which compared these findings from Lord Howe Island with islands listed on the World Heritage List for both their natural and cultural values would be particularly helpful in further assessing the implications of World Heritage listing for the environmental management of islands.

Other suggestions for research were raised by Island residents during the course of carrying out this research. These include: land tenure issues; demographic challenges, including how to address job shortages and issues of limited residential capacity; introduced and threatened species management and social tensions that exist between Islanders and non-Islanders.

### 7.3 Heritage Management - Caring for place

Effectively caring for place requires respecting diversity of knowledge. Caring for place requires respecting science as well as the embodied knowledge of residents, that is akin to the concept of 'intangible cultural heritage'. Future research agendas in the field of cultural and natural heritage require appropriate sets of conceptual and methodological tools to facilitate conversations and an ongoing process of learning. To produce qualitative meaningful results it is crucial that methods are flexible and the researcher is open to an ongoing process of learning cultural protocol and readjusting the methods accordingly. Perhaps all too often, some environmental managers arrive at their destination with a preconceived agenda underpinned by their way of knowing that does not engage with other knowledge-making practices. Equally, researchers arrive at their research destination with a rigid and prescribed research agenda that does not facilitate an ongoing process of learning. Similarly, sometimes the exclusion of Islanders from participation in decision-making leads to hostility to both managers and management outcomes, when their real concern is the *processes* informing those outcomes. In order to effectively care for place it is essential that environmental managers as well as researchers arrive at their destination with an openness toward different knowledges and ideas as well as a willingness to learn cultural protocol.

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## Appendix 9.1: Rigour Table

Research Strategies employed in this Project	Rigour			
	<b>Credibility:</b> Authentic representations of lived experience.	<b>Transferability:</b> Extent to which findings fit within context outside the study situation.	<b>Dependability:</b> Minimisation of idiosyncrasies in interpretation.	<b>Confirmability:</b> Extent to which biases, motivations, interests or perspectives of the inquirer influence interpretations
Transcripts were returned to respondents who indicated on the consent form that they wished to revise/edit their interview transcript.				
A research diary documenting the research process – problems, findings, ‘researcher-researched relationship’ and researcher subjectivity.				
Triangulation enabled through: the use of multiple methods including in-depth interviews and surveys; the use of different sources to confirm a construct including the use of quotations from different respondents.				
Participant recruitment table gives a description of participant’s characteristics.				
Stratified purposeful sampling employed. Credibility was enhanced by this strategy because a diversity of respondents with different values and interests concerning the Island were recruited.				
Participant recruitment continued until thematic saturation.				
Disciplined subjectivity/bracketing – the researcher remained conscious of their subjectivity throughout the project by engaging in critical reflexivity using a research diary.				
The researcher engaged with persistent observation throughout the research project. This involved focusing on the “things that count” in terms of the research question.				
Prolonged engagement – the researcher spent four weeks in the field. This helped to establish a rapport with interview participants and identify commonalities and differences				

between the researcher and the Island community.				
Peer debriefing – research conducted under the supervision of two academic peers.				
A thick detailed description of the study context will be included in final publication.				
Low-inference descriptors employed including field notes and audio-recordings of interviews.				
Interviews were mechanically recorded				
Triangulation was enabled through the use of an ‘Inquiry Audit’ this involved the supervision of project by two academic peers				
Verbatim accounts of interviews are included within the report, revealing how meanings are expressed in the respondent’s own words.				
Detailed, thick descriptions of the research process, the problems encountered and the study context were kept in a research diary				
Critical reflexivity was employed to ensure that the researcher reflected on their changing positionality throughout the project.				

## Appendix 9.2.1: Completed HREC Ethics Application Form

Research Office use

only

HE 11/  
\_\_\_\_\_

UNIVERSITY OF WOLLONGONG/SOUTH EASTERN SYDNEY & ILLAWARRA  
AREA HEALTH SERVICE

### Human Research Ethics Committee

#### **APPLICATION FOR APPROVAL TO UNDERTAKE RESEARCH INVOLVING HUMAN PARTICIPANTS**

#### **A. GENERAL INFORMATION**

---

**1. Descriptive Title of Project:**

Living in Paradise: Negotiating the World Heritage Framework on  
Lord Howe Island

**2. 7 line summary of project aims:**

The objective of this honours project is to investigate the implications of World Heritage designation on the everyday lives of residents on Lord Howe Island. To achieve this objective the aim of the project is to explore the following three questions. How are Lord Howe Island (LHI) residents influenced by the environmental regulatory frameworks and definitions? How do residents negotiate in their everyday lives the boundaries of 'culture' and 'nature' as

specified in legislation? Does the World Heritage listing contribute to increased protection of what residents value about LHI, or is understood to threaten these values?

### 3. Participating Researchers

**Summarise the qualifications and experience of all personnel who will be participating in the project.**

**NB: For student research, a Supervisor must be the Principal Investigator.**

Principal Investigator/Supervisor		
Title	First Name	Family Name
Dr	Michael	Adams
Qualifications	PhD (UOW), BLArch (USyd), BA Hons (USyd)	
Position	Lecturer	
Role in project, relevant research experience (if no experience, describe how relevant experience will be obtained)	Twenty years experience in policy, management and research in protected area and Indigenous issues.	

<b>Second Investigator (in absence of PI)</b>		
Title	First Name	Family Name
A/P	Gordon	Waitt
Qualifications	PhD (Edinburgh), MA (1 <sup>st</sup> class honours, Edinburgh)	
Position	Lecturer	
Role in project, relevant research experience (if no experience, describe how relevant experience will be obtained)	around 25 years research experience in human geography	

<b>Co-Investigator/Student</b>		
Title	First Name	Family Name
Ms	Lucy	Farrier
Qualifications	BA Science (Land and Heritage Management)	
Position	Honours Student	
Role in project, relevant research experience (if no experience, describe how relevant experience will be obtained)	The honours student will be conducting qualitative research with participants, including interviews, a survey and observation. Lucy has some qualitative research experience.	

**Please add extra boxes for additional researchers**

#### 4. Contact details for correspondence

Name: Lucy Farrier

Postal Address: 10A Toxteth Avenue, Austinmer, 2515, NSW

Email: lf764@uowmail.edu.au

Phone: 0400628273

If principal contact is not the Principal Investigator, please provide the contact details for the PI:

Name: Dr Michael Adams

Postal Address: School of Earth and Environmental Sciences

Email: madams@uow.edu.au

Phone: 4284

#### 5. Expected duration of Research (Please specify as near as possible 'start' and 'finish' dates for the conduct of research):

FROM: April 2 2011

TO: October 12 2011

#### 6. Purpose of Project

Indicate whether the research is one or more of the following:

☐ Staff Research (University of Wollongong)

☐ Staff Research (SESIAHS)

☒ Student Research - specify: Honours

Course undertaken: EESC401

Unit/Faculty/Department: School of Earth and  
Environmental Science

Supervisor/s: Michael Adams and Gordon Waitt

☐ Other (Please specify) \_\_\_\_\_

**7. Has this research project been reviewed by any other Institutional Ethics Committee?**

YES ☐ NO ☒

**If no, go to Section B. If YES:**

**7.a What committees has the application been submitted to?**

**7.b What is the current status of these applications? Please include copies of *all correspondence* between the sponsor or researcher and the other Ethics Committee(s) to this point.**

**B. FINANCIAL SUPPORT FOR RESEARCH**

**8. What is the source and amount of funding from all sources for this research?**

Source (Name of Organisation / Funding Scheme)	Amount
School of Earth and Environmental Science	\$500.00

**For sponsored research please include the budget for the trial including information about capitation fees, payments to researchers, institutions or organisations involved in the research, current and consequential costs and costs which may be incurred by participants.**

**If the research is sponsored:**

**8.a Is there any affiliation/association or financial interest between the researcher(s) associated with this research and the sponsor/funding body/supplier of a drug, surgical device or other therapeutic device to be used in the study?**

**YES** ☐ **NO** ☒

**If Yes, Please detail.**

**8.b Are there any conditions placed on this research by the funding body?**

**YES** ☐ **NO** ☒

**If YES, please provide details and provide a copy of the contract/letter of agreement with the funding organisation detailing the terms on which the research is being supported.**



**8.c Is a copy of the HREC approval to be forwarded to the Granting Body?**

YES ☐ NO ☒

**If YES, please advise of any deadlines.**

## C. RESEARCH METHODS

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### 9. Research Categories

**Please mark the research categories relevant to this research proposal. At least one category should be marked for each grouping. You should mark as many categories as are relevant to the proposed research. For "Other", please specify.**

#### A Research procedures used

- ☒ Anonymous questionnaires/ surveys
- ☐ Coded (potentially identifiable) questionnaires/ surveys
- ☒ Identifiable questionnaires/ surveys
- ☐ Examination of student work, journals etc
- ☐ Examination of medical, educational, personnel or other confidential records
- ☐ Observation (overt)
- ☐ Observation (covert)
- ☒ Interviews (structured or unstructured)
- ☐ Telephone interviews

- ☐ Procedures involving physical experiments (e.g. exercise, reacting to computer images)
- ☐ Procedures involving administration of substances (e.g. drugs, alcohol, food)
- ☐ Physical examination of participants (including eg. blood glucose, blood pressure and temperature monitoring)
- ☐ Collection of body tissues or fluid samples
- ☐ Surgical procedures
- ☐ Other: \_\_\_\_\_

## B Research areas

- ☒ Qualitative research
- ☐ Social Science research
- ☐ Humanities research
- ☐ Educational research
- ☐ Health research
- ☐ Psychological research
- ☐ Comparison or evaluation of drugs or surgical or other therapeutic devices
- ☐ Comparison or evaluation of clinical procedures
- ☐ Comparison or evaluation of counselling or training methods
- ☐ Investigation of the effects of an agent (drug or other substance)
- ☐ Investigation of bio-mechanical processes
- ☐ Biomedical research
- ☐ Epidemiology
- ☐ Genetic research
- ☐ Other: \_\_\_\_\_

**10. Does the project involve: the use of drugs, a surgical device, a therapeutic intervention, or a physiological trial?**

YES ☐ NO ☒

If no, go to Q11. If YES:

**10.a Please give details of the type of intervention and provide evidence that appropriate indemnity and compensation arrangements are in place to ensure adequate compensation to participants for any injury suffered as a result of participation in the trial (Indemnification forms and, if the research is being undertaken in a private practice, evidence of adequate and appropriate insurance coverage).**

**10.b Is the research registered:**

- ☐ As a CTN Trial with the TGA
- ☐ As a CTX Trial with the TGA
- ☐ On any national or international clinical trial registers
- ☐ Other (Please detail)

**11. Research design and justification**

**Describe what you want participants to do and justify the design. Please provide an explanation in terms understandable by a non-expert reader. A flow chart or other diagram illustrating the sequence of research activities should be included if possible. For research involving a treatment or physical intervention (eg clinical studies, physiological trials, mental health interventions) a protocol should be provided.**

The research design of this project comprises two stages. Stage 1 involves distribution of a one-page survey to all residents on Lord Howe Island. Stage 2 will involve conducting interviews with

residents of Lord Howe Island who accept an invitation to be further involved with the project.

Stage 1: The aim of the survey is to identify which places are valued by Lord Howe islands residents and why. The survey will be delivered to every household on the island via post office boxes. There are approximately 350 residents. The survey will invite participants to answer three questions: first to locate the places that they value on a map, second to explain why they value these places, and, finally to identify what they understand as threatening these valued places. This method is appropriate because it will enable the mapping and quantification of valued places and their threats.

The survey will invite participants to provide their contact details if they would like to be further involved in the project (see Appendix A).

Stage 2: The aim of the semi-structure interview is to enable residents to tell their stories that reveal why they value particular island places. The semi-structured interview will be divided into three sections. The first section will explore the participant's connection to the island. The second section will invite the participants to discuss their lived experiences of why particular islands places are important. The third section will explore what residents understand as the greatest threat to these places. The fourth section will explicitly explore the participant's understanding of thirty years of World Heritage designation, if this has not been raised in the discussion (see Appendix B). A semi-structured interview is appropriate because it will provide empirical data suitable for discourse analysis – that is an analysis that identifies sets of ideas that give meaning to the world.

## **12. Statistical design**

Any research project that involves the collection of data should be designed so that it is capable of providing information that can be analysed to achieve the aims of the project. Usually, although not always, this will involve various important statistical issues. It is important that the design and analysis be properly planned in the early stages of the project. You should seek statistical advice. The University of Wollongong has a Statistical Consulting Service that provides such advice to research students and staff undertaking research.

**Are statistical issues relevant to this project?**

**YES** ☐ **NO** ☒

**If no, go to Q13. If YES:**

**12.a Have you discussed this project with the Statistical Consulting Service or any other statistical advisor?**

**YES** ☐ **NO** ☐

**If NO, please explain why not.**

**12.b Provide the calculations used to determine the appropriate sample size. If no power calculations have been done please explain the reason for choosing the sample size.**

## **D. ETHICAL CONSIDERATIONS**

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**13. What are the ethical considerations relevant to the proposed research, specifically in relation to the participants' welfare, rights, beliefs, perceptions, customs and cultural heritage? How has the research design addressed these considerations? Consideration should be at both individual and collective level.**

### **Stage 1**

In regards to survey, the key ethical issues are as follows,

#### **Consent:**

In this project consent is tacit, that is, it is indicated by completion and return of the survey.

#### **Informed Consent:**

Detailed information is provided prior to the start of the survey regarding the aims of the research, who is conducting the research,

and the expected outcomes. This information will enable potential participants to make an informed decision if they wish to complete and return the survey.

### **Privacy and Confidentiality:**

On the last page of the survey, respondents are invited to participate further in this project by providing a contact phone number or email address (see Survey, Appendix A).

Where the participant is wishing to receive survey findings and/or is willing to be part of future research plans related to this study, contact details will be given. Hence, these survey forms become potentially identifiable. Confidentiality of contact details will be maintained through secure management of contact details. Contact details will not be used in conjunction with survey data. In this way the privacy of the respondent will be maintained

## **Stage 2**

In regards to the semi-structured interviews, the key ethical issues are as follows,

### **1. Informed consent**

A participant information sheet will be used in this project to ensure informed consent of participants. The participant information sheet will be forwarded to participants at least one week before an interview is organised. Before starting an interview, participants will be asked if they are familiar with the aims and objective of the project.

### **2. Maintaining privacy and confidentiality.**

Lord Howe Island has a very small total population, only 350 people. Thus, no guarantee of confidentiality can be given with such a small total population. Hence while all effort will be taken to ensure the privacy and confidentiality of participants, it will be noted that this can not be guaranteed. Amongst residents, the stories may be identifiable. Strategies deployed to maintain privacy and confidentiality will include the option on the consent form to be allocated a pseudonym or their real name to be used in all forms of publication. (see Appendix D: Participant Information Sheet)

**3. Transparency of recorded data.**

Transcribed interviews will be made available to that participant on request.

**E. RISKS AND BENEFITS**

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- 14. Does the project involve the risk of emotional distress or physical harm, or the use of invasive procedures (e.g. blood sampling)?**

YES ☐ NO ☒

**If YES**

**14.a What are the risks?**

**14.b Explain how the risks of harm or distress will be minimised. In the case of risks of emotional distress, what provisions have been made for an exit interview or the necessity of counselling?**

- 15. Is information about criminal activity likely to be revealed during the study?**

YES ☐ NO ☒

**If YES, have you included a caution regarding any relevant mandatory reporting requirements in the Participant Information package?**

**16. Detail the expected benefits of the study to the participants and/or the wider community.**

This research project will benefit the Island community by examining and documenting their cultural heritage values, that is, the places that are meaningful to residents. In doing so, this project will also provide the Lord Howe Island Board with an in-depth understanding of whether the valuing system that underpins the World Heritage listing is complementary to, or conflicting with how residents value the island. Thus, this research will contribute to the future management of Lord Howe Island, by assisting in the development of management plans that respond to both resident's concerns and the conservation of nature valued by science.

**F. PARTICIPANTS**

---

**17. Mark the categories relevant to this proposal.**

- ☒ Healthy members of the community
- ☐ University students
- ☐ Employees of a specific company/organisation
- ☐ Members of a specific community group, club or association
- ☐ Clients of a service provider
- ☐ Health Service clients (e.g. users/clients of a health service)
- ☐ School children
- ☐ Hospital in-patients
- ☐ Clinical clients (e.g. patients)
- ☐ Aboriginal/Torres Strait Islander people
- ☐ Members of socially disadvantaged groups
- ☐ Cadavers/ cadaveric organs
- ☐ Other (please specify): \_\_\_\_\_



**18. Expected age(s) of participants – please mark one or more**

- ☐ Children (under 14)
- ☐ Young people (14-18)
- ☒ Adults (> 18)

**19. What is the rationale for selecting participants from this/these group/s?**

This project involves examining the way in which World Heritage listing has affected residents of Lord Howe Island. Lord Howe Island has a small permanent residential community of approximately 350 people, the majority of this community are adults. This project aims to interview as many residents of Lord Howe Island as possible in order to get a wide selection of responses from the local community.

**G. RECRUITMENT**

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**20. How will potential participants be approached initially and informed about the project? e.g. direct approach to people on the street, mail-out to potential participants through an organisation, posters or newspaper advertisements, etc. Please explain in detail and include copies of any letters, advertisements or other recruitment information.**

Stage 1: Recruitment for Stage 1 will occur through an article published in the local newspaper on Lord Howe Island approximately one week before the researcher arrives on the island (See Appendix C). The survey will be distributed to every resident on the island through letter boxes located at the post office on the island.

Stage 2: Recruitment for Stage 2 will occur through survey respondents. All survey respondents are invited to further participate

in the project. To do so they are asked to provide their contact details on the survey if they wish to participate in the interviews.

**21. Where will potential participants be approached by the researchers to seek their participation in the research, and where will research activities involving participants be conducted?**

Stage 1: potential respondents will be approached through a mail-out survey

Stage 2: those survey respondents who provide their contact details will be contacted by email or telephone and invited to participate in an interview. Interviews will be conducted in a convenient time and public place on Lord Howe Island.

**22. How many participants in total do you anticipate will be involved in the project? If the research has several stages and/or groups of participants, please provide the total number of participants expected as well as the number and participant group involved in each stage.**

Stage 1: There are approximately 350 permanent residents on Lord Howe Island. The number of temporary residents on the island at the particular time of the visit to the island is unknown. The researcher hopes to involve all the temporary and permanent residents on the island in this project. If the mail-out survey generated a normal response rate of around 10 per cent, then this stage will have only around 35-40 returns.

Stage 2: At least 20-30 participants are anticipated to be interviewed.

## **H. CONSENT PROCESS**

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**Generally the consent of participants must be obtained prior to conducting research. If you do not intend to seek people's permission to use information about them which may be identifying, you may need an exemption from State and Federal Privacy requirements. This is addressed in Section I.**

**Attach copies of any letters of invitation, information packages, consent forms, proxy/substitute consent forms, debriefing information, identification cards, contact detail cards, etc.**

- 23. Will consent for participation be obtained from participants or their legal guardians?**

**YES ☒ NO ☐**

**If NO, go to Q31.**

- 24. How will consent for participation be obtained?**

- ☒ **in writing**
- ☐ **verbally**
- ☒ **tacit (eg indicated by completion and return of survey)**
- ☐ **other (please specify) \_\_\_\_\_**
- ☐ **consent not being sought**

**Please explain why the method chosen is the most appropriate and ethical.**

Stage1:

For the survey, tacit method of consent was regarded as the most appropriate and ethical method of consent because this stage of the project will not involve any face-to-face contact with any households or participants.

Stage 2:

For the interview, participants will be sent a participant information sheet prior to the interview, and sign a consent form before commencing the interview. Participants in this project should be

relatively familiar with the concept of consent, and the process of signing a document. An explanation will be provided outlining the importance of consent, and what participants are agreeing to by signing the consent form. (See Consent Form, Appendix E)

**25. Is it anticipated that all participants will have the capacity to consent to their participation in the research?**

**YES** ☒ **NO** ☐

**If NO, please explain why not (e.g. children, incompetent participants, etc.) and explain how proxy or substitute consent will be obtained from the person with legal authority to consent on behalf of the participant.**

**26. For participants who have the capacity to consent, how does the process ensure that informed consent is freely obtained from the participant?**

Survey: Consent from the participant is obtained by the completion and return of the survey. Thus, the project design ensures that consent can be freely obtained from the participant.

Interview: A participant information sheet will have been sent to each participant at least one week prior to the interview (appendix D). The participant information sheet will outline the aims and objectives of the project. Each participant will be given a participant information sheet to keep. This gives the participants sufficient time to reflect on their involvement in the project before the beginning of each interview. Before starting an interview, each participant will be asked if they have any concerns or questions about the project.

**27. Are any participants in a dependant relationship with the researcher, the institution, or the funding body (for example**

**the researcher's clinical clients or students; employees of the institution; recipients of services provided by the funding body)? If so, what steps will be taken to ensure that participants are free to participate or refuse to participate in the research?**

No

- 28. How does the project address the participants' freedom to discontinue participation? Will there be any adverse effects on participants if they withdraw their consent and will they be able to withdraw data concerning themselves if they withdraw their consent?**

Stage1:

Due to the anonymous quality of the survey, households who receive a questionnaire are free to participate or refuse to participate without any adverse effects. Should a participant withdraw their contact details at any time within the timeframe of the project they will be able to so without any adverse effects.

Stage 2:

The participants that agree to participate in a follow-up interview will have the right to withdraw their consent throughout the entirety of the project and this will be made clear to them at the beginning. This will be included in the written consent form and will be communicated verbally as well. Participants' withdrawal will not have any adverse effects for them.

- 29. Does the project involve withholding relevant information from participants or deceiving them about some aspect of the research?**

YES ☐ NO ☒

**If YES, what is the justification for this withholding or deception and what steps will be taken to protect the participants' interest in having full information about their participation?**

- 30. Will participants be paid or offered any form of reward or benefit (monetary or otherwise) for participation in the research? If so, please detail and provide a justification for the payment, reward or benefit.**

No

## **I. CONFIDENTIALITY AND PRIVACY**

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- 31. How will the privacy of individual subjects be protected when recording and analysing the data?**

Names and contact details of the survey respondents will be separated from the survey data. Contact details are not needed for data analysis and will only be used for recruitment for the follow-up interviews.

Recorded materials will only be accessible to the principal researchers and the co-investigator. All recorded materials will then be securely stored by Eylse Stanes (Human Geography Technical Support Officer) in the Human Geography Research Room in building 41, School of Earth and Environmental Sciences.

Participants will be invited to check their transcriptions for accuracy. During transcription all participants who asked for their privacy to be maintained will be given a pseudonym. In addition, for participants who seek their identity to remain confidential, given names will not be used in any form of publication. The data will then be securely stored for five years by Eylse Stanes (Human Geography Technical Support Officer) in the Human Geography Research Room in building 41, School of Earth and Environmental Sciences.

- 32. Will information collected from data or interview be published or reported?**

**YES** ☒ **NO** ☐

**If YES, what form this will take? All uses of data must be explicitly consented to.**

Findings may be published in scholarly articles and presented at academic and policy conferences. Potential use of the data in publications will be listed on the consent form.

**33. Will any part of the research activities be placed on a visual or audio recording (eg audiotape, photograph or video-tape)?**

YES ☒ NO ☐

**If YES,**

**33.a What will the recording be used for?**

Audio-recording will be used during interviews for the purpose of accurately transcribing the discussions.

**33.b Who will see/hear the recording?**

The only person who will hear the audiotapes is the co-investigator.

**34. Data (including questionnaires, surveys, computer data, tapes, transcripts and specimens) must be securely stored at all times. Where will the data be held and who will have access to it:**

**a. during the project?**

Surveys: For the duration of the project, the survey data will be held within a locked file cabinet in the Human Geography Research Room in building 41, room G30. Access to the surveys will be restricted to the Chief investigator of the project.

Survey data and interview transcriptions will be stored in password protected folders on the R: drive within the School of Earth and Environmental sciences

Interviews: The recorded interview files will be kept held within a locked file cabinet in the Human Geography research room in building 41, room G30. Access to the surveys will be restricted to the Chief investigators of the project.

**b. on completion of the project?**

On completion of the project, survey data and recorded interview files will be kept in the Human Geography room with access restricted to the Chief investigators.

Survey data and interview transcriptions will be stored in password protected folders on the R: drive within the School of Earth and Environmental sciences.

- 35. Data should be held securely for a minimum of 5 years (15 years for clinical research) after completion of the research. How long will the data be stored for? If it is not being stored, please provide an ethical justification for this.**

The data collected during this project will be held for a minimum of 5 years within the Human Geography Research Room in building 41, and then securely destroyed.

- 36. Does this project involve obtaining identifiable information (e.g. data) from a third party without prior consent from the participant or their legal guardian?**

**YES** ☐ **NO** ☒

**If NO: You have completed the questionnaire. Please ensure that the form has all the appropriate signatures and attachments (see checklist) before submission.**

**If YES: go to question 37.**

- 37. Who will be providing the information? Please include copies of any correspondence regarding permission to access this information from a responsible officer of the Agency.**

- 38. Will the information be deidentified during collection, use, or disclosure?**

**YES** ☐ **NO** ☐

**If NO: You must apply for an exemption to the State and Federal Privacy Acts. Please complete the Privacy Exemption Application Form available from the 'Forms' section of the Ethics webpage.**

**If YES:**

- 38.a Who will be deidentifying the information? Is this a person who would normally have access to the information?**



**38.b How and when will the data be deidentified?**

## J. DECLARATION BY INVESTIGATORS

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### **Principal Investigator:**

- I certify that I am the Principal Investigator named on the front page of this application form.
- I undertake to conduct this project in accordance with all the applicable legal requirements and ethical responsibilities associated with its carrying out. I also undertake to take all reasonable steps to ensure that all persons under my supervision involved in this project will also conduct the research in accordance with all such applicable legal requirements and ethical responsibilities.
- I certify that adequate indemnity insurance has been obtained to cover the personnel working on this project.
- I have read the *National Statement on Ethical Conduct in Human Research* and the *Australian Code for the Responsible Conduct of Research*. I declare that I and all researchers participating in this project will abide by the terms of these documents.
- I make this application on the basis that it and the information it contains are confidential and that the Human Research Ethics Committee of The University of Wollongong/SESIAHS will keep all information concerning this application and the matters it deals with in strict confidence.

---

Name (please print)

Signature

Date

**Signature/s of other researcher/s:** The first named researcher will assume responsibility for the project in the absence of the Chief Investigator. All investigators must sign the application.

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Name (please print)	Signature	Date
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---

Name (please print)	Signature	Date
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**Include additional lines if necessary.**

#### **K. APPROVAL BY HEAD OF UNIT**

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**This person must not be a member of the research team.**

I am aware of the content of this application. I am satisfied that:

- All appropriate safety measures have been taken;
- The research is in accordance with UOW/SESIAHS Policy;

and approve the conduct of the project within this unit.

---

Name (please print)

Signature

Date

**NOTE: RESEARCH MUST NOT COMMENCE UNTIL THE APPLICATION  
HAS BEEN APPROVED BY THE HREC.**

## CHECKLIST (for applicants use)

Applications should be sent to:        Ethics Unit  
Research Services Office  
University of Wollongong  
Wollongong NSW 2522

Applications for the full HREC require 15 copies plus the original. Applications to the Executive Committee of the HREC (expedited review) only require the original.

- ☐ Original Ethics Application plus appropriate number of copies (See Web)
- ☐ Participant Information Sheet/Package
- ☐ Consent Form(s)
- ☐ Copies of Questionnaire(s)/Survey(s) or Interview/Focus Group Questions
- ☐ Copies of all material used to inform potential participants about the research, including advertisements and letters of invitation.
- ☐ Evidence of permission to conduct research from site managers (Not required for research sites within NSW Dept of Health)
- ☐ Evidence of approval/rejection by other HREC(s), including comments and requested alterations to the protocol
- ☐ Copies of Confidentiality Agreement templates for any third parties involved in the research
- ☐ Copy of Research Contract for sponsored/contract research
- ☐ Copy of 'Clinical Trial Insurance Requirements' Form (UOW researchers answering Yes to Q10 only)
- ☐ Privacy Exemption Application (researchers answering No to Q38 only)

For **Clinical Trials** you should also include:

- ☐ Protocol (16 copies)
- ☐ Summary Sheet (16 copies)
- ☐ Budget (16 copies)
- ☐ Investigator's Brochure (6 copies)
- ☐ Indemnity Form/s (3 copies)
- ☐ CTN or CTX Form (1 original copy)
- ☐ Insurance information (1 copy)
- ☐ Clinical Trial Agreement (1 copy)

## Appendix 9.2.2: HREC Ethics Approval

University of Wollongong



**INITIAL APPLICATION APPROVAL**

In reply please quote: JML:CJ HE11/109

Further Enquiries Phone: 4221 4457

1 April 2011

Ms Lucy Farrier  
10A Toxteth Avenue  
AUSTINMER NSW 2515

Dear Ms Farrier,

Thank you for your response received 29 March 2011 to the HREC review of the application detailed below. I am pleased to advise that the application has been approved.

Ethics Number: HE11/109  
Project Title: Living in Paradise: Negotiating the World Heritage Framework on Lord Howe Island  
Researchers: Ms Lucy Farrier, Dr Michael Adams, A/Prof Gordon Waitt  
Approval Date: 31 March 2011  
Expiry Date: 30 March 2012

The University of Wollongong/SESIAHS Humanities, Social Science and Behavioural HREC is constituted and functions in accordance with the NHMRC *National Statement on Ethical Conduct in Human Research*. The HREC has reviewed the research proposal for compliance with the *National Statement* and approval of this project is conditional upon your continuing compliance with this document. As evidence of continuing compliance, the Human Research Ethics Committee requires that researchers immediately report:

- proposed changes to the protocol including changes to investigators involved
- serious or unexpected adverse effects on participants
- unforeseen events that might affect continued ethical acceptability of the project.

You are also required to complete monitoring reports annually and at the end of your project. These reports are sent out approximately 6 weeks prior to the date your ethics approval expires. The reports must be completed, signed by the appropriate Head of School, and returned to the Research Services Office prior to the expiry date.

Yours sincerely

**A/Professor Garry Hoban**  
**Chair, Human Research Ethics Committee**

cc: Dr Michael Adams, School of Earth and Environmental Sciences

Research Services Office University of Wollongong NSW 2522 Australia  
Telephone: +61 2 4221 3386 Facsimile: +61 2 4221 4338  
research\_services@uow.edu.au www.uow.edu.au/research  
CRICOS Provider No: 00102E

## Appendix 9.2.3: Participant Information Sheet

### PARTICIPANT INFORMATION SHEET

#### Living in Paradise:

#### Negotiating the World Heritage framework on Lord Howe Island

**The Project:** The project *aim* is to better understand how the World Heritage designation influences the everyday lives of Lord Howe Island (LHI) residents. And, in doing so, to investigate the similarities and differences between the valuing systems that underpins the World Heritage listing and those of residents.

The project *objective* is to investigate the implications of World Heritage designation on the everyday lives of residents on LHI. The project hopes to first identify the different places on LHI that are meaningful to residents. Then explore why these places are meaningful to different residents. And finally, to investigate what threatens these important island places.

**The Focus:** The project focus is to investigate the implications of World Heritage designation on the everyday lives of residents on LHI. Hence, the key questions driving this project are: What is the impact of World Heritage listing on the everyday lives of residents? How do environmental regulatory frameworks and definitions influence LHI residents? Does the World Heritage listing contribute to increased protection of what residents value about LHI, or is World Heritage designation understood to threaten particular practices, places, plants or animals?

**What you will be asked to do:** Participation involves participating in a conversation style interview for around 30 minutes to 1 hour to explore how the World Heritage designation of LHI influences your everyday life. The interview will be divided into three sections. The first section will explore your connection to the Island. The second section discusses why particular islands places are important to you. The third section will explore what you understand as the greatest threats to these places. The fourth section will explicitly explore your understanding of thirty years of World Heritage designation.

With your consent, the interview will be recorded and transcribed. On the consent form you are invited to request a copy of the transcript of this interview to inspect and submit any edits/revisions. Any edits/revisions to the transcript must be submitted to the project organisers listed below by the 1 July 2011. You will also be asked if you wish to be given a pseudonym and if direct quotations from the interview may be used in scholarly publications. However, you must remain mindful that given the small resident population of LHI, your responses may be identifiable to other residents even with the use of a pseudonym. Confidentiality will be maintained in all publications and presentations on the research unless you indicate in the consent form that you are willing to be identified.

Your involvement in the study is voluntary and you may withdraw your participation and any data that you have provided within a reasonable time frame for the project. In this instance

this would normally be around two months after the transcription of the interview. Withdrawal from the project will not affect your relationship with the University of Wollongong.

**The Project Organiser:** If you have any enquiries about the research, please contact: Dr Gordon Waitt (02 4221 3684; [gwaitt@uow.edu.au](mailto:gwaitt@uow.edu.au)) or Dr Michael Adams (02 4221 5392; [madams@uow.edu.au](mailto:madams@uow.edu.au)). This study has been reviewed by the Human Research Ethics Committee (Social Science, Humanities and Behavioural Science) of the University of Wollongong. If you have any concerns or complaints regarding the way this research has been conducted, you can contact the University of Wollongong Ethics Officer on (02) 4221 4457.

***Thank you for your interest in this study.***



## **Appendix 9.2.4: Consent Form**

### **CONSENT FORM**

#### **Living in Paradise: Negotiating the World Heritage Framework on Lord Howe Island**

**Lucy Farrier, Gordon Waitt and Michael Adams,**

**School of Earth and Environmental Sciences, Faculty of Science**

I have been given information about 'Living in Paradise: Negotiating the World Heritage Framework on Lord Howe Island'. I have had an opportunity to discuss the research project with Lucy Farrier, Michael Adams or Gordon Waitt who are conducting the research through the University of Wollongong. At this time I have asked any questions I may have about the research and my participation.

I have been advised of the potential risks and burdens associated with this research. I understand this includes participating in a conversation style interview for around 30 minutes to 1 hour.

I understand that my participation in this research is voluntary; I am free to withdraw from the research at any time. My withdrawal from participation will not affect my relationship with the University of Wollongong.

I understand that the data collected from my participation will be used for scholarly publications, conference presentations and reports, and I consent for it to be used in that manner. If I have any enquiries about the research, I can contact Dr Gordon Waitt (02 4221 3684; [gwaitt@uow.edu.au](mailto:gwaitt@uow.edu.au)) or Dr Michael Adams (02 4221 5392; [madams@uow.edu.au](mailto:madams@uow.edu.au)). If I have any concerns or complaints regarding the way the research is or has been conducted, I can contact the Ethics Officer, Human Research Ethics Committee, Office of Research, University of Wollongong on 4221 4457.

I understand that I have an option to receive and check my transcript. I understand that any edits/revisions made to the transcript must be submitted by the 1 July 2011

☐ I wish to receive a copy of my transcript.

By signing below I am indicating my consent to:

- ☐ participate in a conversation style interview of 30 minutes to 1hr duration held in a convenient place
- ☐ have the conversation style interview audio-taped by the researcher for later transcription and analysis
- ☐ be directly quoted in publications with use of my given name/pseudonym (please circle one of the options)
- ☐ for the information I provide to be confidential, with the understanding that some information I provide may be identifiable by context. I do not wish to be directly quoted in publications.

**Signed**      **Date**

...../...../.....

Name (please print)


.....

Terms and conditions: I understand that my personal particulars will be stored by Dr Michael Adams and Dr Gordon Waitt, University of Wollongong, for a minimum of five years for record keeping and administrative purposes only and will not be supplied to any other person or organisation for any other purpose.

### Appendix 9.3.1: Correspondence between Researcher and Lord Howe Island Board Ranger

Date	Lord Howe Island Board	Communication Type	Communication
Friday 4 March	Lord Howe Island Board Office	Mail	Research proposal sent to the Lord Howe Island Board
Thursday 10 March	Lord Howe Island Board Ranger	Email	<p>Hi [REDACTED]</p> <p>My name is Lucy Farrier and i am hoping to do my honours research project on the island this year (i think you have been in contact with my supervisor Michael Adams via email). I sent my research proposal to the Board last Friday and i was wondering if you could tell me whether it has arrived. Also, do you know how long the Board usually takes to approve these matters?</p> <p>Kind Regards, Lucy</p>
Thursday 17 March	Lord Howe Island Board Ranger	Email	<p>Hi Lucy,</p> <p>Yes I have received your application. I've attached the LHIB Research Application Form for you to fill out. Sorry, necessary formality. A lot of the sections you can cut-&amp;-paste from your original application. Once you forward this on to the Board, I can start to review it. No need to duplicate your CV's, I'll attach your original application to the Form. I've had a quick look at you original proposal so the review process should only take a couple of weeks.</p> <p>Regards, [REDACTED]</p>
Thursday March 24	Lord Howe Island Board Ranger	Email	<p>Hi [REDACTED]</p> <p>Attached are the articles to be published in the Signal on the 1 April. i have included the main article informing the residents about my project and a reminder article (to remind residents to complete their surveys). As you may notice, i sent you the main article to put in the</p>

			<p>Signal yesterday (23 March), however, i forgot to differentiate my research from Leonardo's research in that article. Therefore, i have sent you the same article revised with these details included. Can you please make sure to give the revised article to Barney to put in the Signal rather than the previous article i sent you.</p> <p>Also, can you please send me a brief email to confirm that you have received the articles,</p> <p>With thanks, Lucy</p>
Friday 25 March	Lord Howe Island Board Ranger	Email	<p>Hi Lucy, All attachments received.</p> <p>Regards, [REDACTED] Ranger</p>
Wednesday 30 March	Lord Howe Island Board Ranger	Email	<p>Hi Lucy, please find attached your research permit.</p> <p>Barney has taken your add and will put it in the Signal this week. He advised me that he would need to shorten it to fit it in. I advised him to leave out the paragraph on the difference between the WH studies. The first 2 paragraphs will go in. If you do not agree, please contact Barney on 6563 2471.</p> <p>Regards, [REDACTED]</p>
Friday 1 April	Lord Howe Island Board Ranger	Email	<p>Hi [REDACTED] Thank you for getting my research approval to me on Thursday and for getting my article to Barney on time, I really appreciate your help.</p> <p>I have attached the Participant Information Sheet and consent form for the project in this email. Perhaps, if possible, you could forward them on to other Board members so that they can have a read of them before i meet with them to talk about my project. On that note, shall i ring you when i arrive on the Island or on Monday the 4th April to organise a time to meet with the Board and present my project. Do you know</p>

			<p>how long this presentation is supposed to be?</p> <p>Thanks again for all your help,</p> <p>Cheers, Lucy</p>
Friday 1 April	Lord Howe Island Board Ranger	Email	<p>Just come into the Board on Monday @ around 10am, ask for either me or Hank Bower. The Board members meet every Wed @ 3pm, just a short chat with them about what you're doing, they'll ask a few questions, then it's done and dusted. I'll forward on your info and book a time with them, which I'll let you know Monday/Tuesday.</p> <p></p> <p>Lord Howe Island Board Ranger</p>

## Appendix 9.3.2: Lord Howe Island Board Research Application



### LORD HOWE ISLAND BOARD (LHIB) Research Application and Proposal

#### 1. Project Title

Living in paradise: negotiating the World Heritage framework on Lord Howe Island

#### 2. LHIB Research Category

*Table 17. Lord Howe Island Biodiversity Management Plan 2007*

[http://www.environment.nsw.gov.au/resources/parks/LHI\\_bmp.pdf](http://www.environment.nsw.gov.au/resources/parks/LHI_bmp.pdf)

Qualitative research in human geography

#### 3. Researcher/s contact details

##### Principal Investigators:

Name: Lucy Farrier

Institution: School of Earth and Environmental Science, University of Wollongong, NSW

Mailing Address: 10A Toxteth Avenue, Austinmer, 2515

Phone No: 0400628273

Fax No:

Email: lf764@uowmail.edu.au

**Collaborating Investigator(s):**

Name: Dr Michael Adams

Institution: University of Wollongong

Mailing Address: School of Earth and Environmental sciences, UOW, Wollongong  
2522 NSW

Phone No: 02 4221 4284

Fax No: 4221 4250

Email: madams@uow.edu.au

Name: Associate Professor Gordon Waitt

Institution: University of Wollongong

Mailing Address: School of Earth and Environmental sciences, UOW, Wollongong  
2522 NSW

Phone No: 02 4221 3684

Email: [gwaitt@uow.edu.au](mailto:gwaitt@uow.edu.au)

#### **4. Commencement and finishing date for proposed research**

Commencement date: 2 April 2011

Finishing date: 12 October 2011

#### **5. Background information for proposed project**

Drawing on scientific knowledge, The Lord Howe Island (LHI) World Heritage (WH) listing recognises this place for its outstanding 'natural' attributes. The listing, and the provisions of the Permanent Park Preserve, together mark a

strong categorical and spatial boundary between 'natural' values and human or cultural significance. Residents of the island conduct their lives within the framework of the WH listing that designates settlements, endangered species and 'significant sites'.

The aim of this honours project is to explore the following questions. How are LHI residents influenced by the environmental regulatory frameworks and definitions? How do residents negotiate in their everyday lives the boundaries of 'culture' and 'nature' as specified in legislation? How do the boundaries of culture and nature embedded in the legislation reflect the realities of the existence for the non-human world? Does the WH listing contribute to increased protection of what residents value about LHI, or is understood to threaten particular practices, places, plants or animals?

This research project differs to archaeological research such as Anderson (2003) by focussing on contemporary social lives. Therefore, the project builds on the work of Heimans (2006). Like Heiman's work this project involves exploring resident's recollections of living on the Island, to better understand how people establish and maintain connections to the island. In contrast to Heimans (2006), this project will primarily focus on the way in which thirty years of World Heritage legislative framework has impacted on this process of place-making.

The project will draw on the concept of 'intangible heritage'. According to Harrington (2009: 19), this concept refers to cultural practises that "... transmit ideas, beliefs, values and emotions" that represent "... the general values and worldviews of a society, and enshrine a community's character and identity". Intangible heritage includes, "language, myth, ritual, custom, dance, arts and crafts, oral traditions, practises, dissemination of knowledge, food and festivals" (Harrington, 2009: 19). Intangible heritage is underpinned by sets of ideas that inform a sense of self in the world, that in turn provides insights to the processes of valuing particular places, people, plants and animals.

To explore the concept of intangible heritage the project will invite all residents on the Island to participate, including, Islanders (original descendants, those who have married in and those with Ministerial designation), rangers and other regulatory staff (for example police) and tourism workers. By incorporating this social diversity into the project, insights are given to the different ways that residents value each other, place, plants and animals.

This research will complement current research conducted by Leonardo Nogueira de Moraes and Lisa King on LHI. Like the research conducted by Leonardo Nogueira de Moraes this project seeks to explore the influence of WH



listing on LHI residents. However, this proposed project employs a spatial approach and the concept of intangible heritage rather than a sociological approach of complex adaptive systems. The aim of Leonardo Nogueira de Moraes work is to explore the way in which interpersonal and inter-organisational relationships of cooperation and competition can act both as drivers or inhibitors to the sustainability of tourism development on small oceanic islands. Current research by Lisa King involves exploring visitor relationships to 'WH' as a protected area brand category. The research by Lisa focuses on the 'visitor' experience on the island. In contrast the proposed honours research will focus entirely on the lived experiences of permanent or temporary residents of LHI.

## **6. Objectives**

*(less than 100 words)*

The objective of this honours project is to investigate the implications of World Heritage designation on the everyday lives of residents on Lord Howe Island.

## **7. Project design and methodology**

*Provide a brief description outlining the design and methodology of the proposed project.*

This qualitative project is designed in three stages. The first stage involves a literature review of work examining the social and cultural geography of the lives of people living in World Heritage designated areas, and specifically Lord Howe Island. The second and third stages involve primary research on the everyday lives of islanders. This second stage will involve a one-page survey to all island households titled 'Living with World Heritage Designation'. Stage three involves semi-structured interview and participant observation. Recruitment for stage three will occur through an invitation to participate in future research from the one page survey.

- Stage 1: Literature review

Evaluation of the literature review will be ongoing. Searches will be conducted using a number of databases available through the library at the University of Wollongong.

- Stage 2: Survey

The survey will explore the concept of ‘intangible heritage’ through the use of a map to locate the places residents value, why they value these places and what places they understand as being under threat. All research involving people at the University of Wollongong requires approval by the Human Ethics Research Committee. An ethics application will be approved before starting this project. Evaluation of the household survey will occur through the return rate. Normally, around a 12 per cent return rate is expected from a household survey. This may be higher because of the small number of islanders.

- Stage 3: Interviews

People who given their consent to participate in an interview will be asked a series of open questions about the places they value on the island, and who and what they regard as a threat to these places. Qualitative research methods are monitored through a reflective research diary. The diary contains a critical evaluation of each interview. Particular attention is given to the relationship between the interviewee and interviewer, body language, how the participant speaks as well as what is said.

### **Aims:**

As stated above, the objective of this research is to investigate the implications of WH designation on the everyday lives of residents on the island. To achieve this objective the aim of the project is to explore these four questions. How are LHI residents influenced by the environmental regulatory frameworks and definitions? How do residents negotiate in their everyday lives the boundaries of ‘culture’ and ‘nature’ as specified in legislation? How do the boundaries of culture and nature embedded in the legislation reflect the realities of the existence for the non-human world? Does the WH listing contribute to increased protection of what residents value about LHI, or is understood to threaten particular practices, places, plants or animals?

### **7a. Research sampling methods (if manipulative research) proposed:    see above**

*Insert additional rows as required*

<b>Common name</b>	<b>Scientific name</b>	<b>Number of specimens</b>	<b>Size of sample / specimen</b>	<b>Location/s proposed</b>	<b>Materials / equipment proposed</b>


## 8. Project outcomes and benefits

*Define expected outcomes from the project for future management on LHI*

An objective stated in the Review of the Lord Howe Island Act 1953 (2010: 5) is to establish “..A well serviced and well governed permanent residential community that cares for the Island’s conservation values and provides services for visitors to the Island is important in ensuring the continued protection of the Island’s conservation values and supporting a sustainable tourism industry.” This research project will provide the LHI Board with an in-depth understanding of how the valuing system that underpins the World Heritage listing is both complementary to and conflicting with how residents value the islands. Thus, the research will contribute to the future management of LHI in aligning conservation of natural values with those of the residents.

## 9. Project milestones

*Define project milestones and dates*

Honours project timeframe - 7th February - 12th October 2011.

Proposed visits to Lord Howe Island:

- Preliminary visit 2-10 April 2011 to distribute household survey;
- Follow-up visit in May 2011 (possibly 2-3 weeks) to conduct follow-up interviews.

Thesis due date – 12 th October 2011

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## 10. Budget (if applicable)

*If in-kind support is sought/required (i.e. LHIB plant use, LHIB staff assistance and use of the LHIB Research Facility), please provide details below*

<b>Requesting</b>	<b>Details</b>	<b>2011/12</b>	<b>2012/13</b>	<b>TOTAL</b>
<b>LHIB In-Kind Contribution</b>		<b>\$</b>	<b>\$</b>	<b>\$</b>
<b>Salaries</b>	<i>E.g. in-kind wages LHIB Staff \$47 per hour</i>			
<b>Operating</b>	<i>E.g. in-kind use of LHIB vehicle @ \$230 per day or \$33 per hour</i> <i>Use of 5 metre RIB vessel "Shearwater" @ \$400 per day or \$50 per hour</i>			
<b>Accommodation</b>	<i>Payment to LHI Board for research station accommodation</i> <i>\$37 per person per day (accommodation)</i> <i>\$49 per day per project (accommodation &amp; lab use)</i>			
<b>LHIB Cash (\$)</b>				
<b>Total</b>				
<b>In-kind Total (\$)</b>				
<b>Proponent Cash</b>	<i>E.g. Research costs for flights and living expenses for research team of 3 people,</i>			
<b>Proponent in-kind</b>	<i>E.g. Salaries for researcher and colleagues for fieldwork and subsequent analyses, report and publications, plus in-kind use of equipment for research.</i>			
<b>Project total</b>				

### 11. Consulting expert(s) if applicable.

Name:	
Institution:	
Mailing address:	
Phone:	Email:

**12: In which locations do you want to operate (Settlement, Permanent Park Preserve)?**

*(Please insert a tick  $\sqrt{\quad}$  adjacent to that which is applicable)*

- ☒ All areas and locations
- ☐ Specific locations - complete table below

Specific location (site name/GPS if applicable)	Frequency of visit/s (daily, weekly, once)	Duration of visit/s (proposed length of time at each location)

**13. Do you hold additional permit/s to undertake this research or have held one previously?**

*(Please insert a tick  $\sqrt{\quad}$  adjacent to that which is applicable)*

☒ No additional permit is required for this activity.

☐ No - additional permit is dependent on this application.

☐ Yes – additional permit name and number:

DECCW Scientific Licence No:

OTHER:

**Please note: additional permits may be required to undertake this research**

\* If research involves species or locations protected under the NSW National Parks and Wildlife Act, NSW Threatened Species Act or the Commonwealth Environmental Protection Act, permits from the Government agencies administering these Acts may also be required. Application forms and more details can be found at the NSW Department of Environment, Climate Change and Water website:

<http://www.environment.nsw.gov.au/wildlifelicences/ScientificResearchLicences.htm>

\* If research involves the taking of marine flora and/or fauna from the LHI Marine Park a LHI Marine Park Authority Permit is required and a NSW Fisheries/Department of Industry and Investment permit is also required. If you do not have a permit under the Fisheries Management Act 1994, it is recommended that you first apply for a NSW Industry and Investment (DPI) permit. NSW Fisheries Research permit application forms can be obtained from the NSW Industry and Investment web site at:

<http://www.dpi.nsw.gov.au/fisheries/info/section-37-permits> Please contact the LHI marine Parks Authority on 02 6563 2359

#### **14. Duration in which a permit is sought:**

From ...../...../..... to ...../...../.....

**15. Ethics approval acquired/required?** Yes ☒ No

Please provide details: Human Research Ethics Committee - University of Wollongong/South Eastern Sydney & Illawarra Area Health Service

(Ethics application will be approved prior to arrival on Lord Howe Island and research commencement)

AEC License No:

**16. Research facility accommodation approval required?** Yes No ☒

*Please provide details:*

How many people: .....

How many nights: .....

Accommodation:

*(Please insert a tick  $\sqrt{\quad}$  adjacent to that which is applicable)*

Accommodation only (\$37 per night per person): \_\_\_\_\_

Accommodation and use of Lab (\$49 per night per project): \_\_\_\_\_

## **17. Insurance requirements for activities commercial in nature:**

Conditions on permits allowing the conduct of commercial activities require that the Permittee must, prior to the commencement of the permitted activities and during the life of the permit, obtain a public liability policy of insurance which covers the following:

*Public Liability cover of not less than ten million dollars (\$10 000 000) in respect of the death of or injury to any person, or the loss of or damage to any property (including a protected area), arising out of or in connection with the Permittee's commercial activity in a marine park, where such death, injury, loss or damage is caused in whole or in part by the conduct, or presence in the marine park, of the Permittee, or employee, agent or client of the Permittee.*

**Before a permit allowing commercial activities is granted evidence that the applicant holds sufficient**

**Public Liability Insurance is required. If the activity is commercial in nature please provide details of public liability insurance cover held by the applicant:**

Public Liability

Name of Insurer:

Policy No.:

Expiry Date:

Amount of Cover:

**As evidence of this please also attach to this application a copy of the Certificate of Currency as proof that you hold the required public liability insurance.**

---



**DECLARATION:**

**I declare that the information I have given on this form is correct.**

**\* Where the applicant is a company I declare that I am duly authorised by the company to sign this application in its behalf.**

**\* When application is made on behalf of a company and you are not the Director, you must attach to the application an authority from the company stating that you may act on the companies behalf in regards to the application.**

**\* When an application is submitted for more than one person, all persons must sign the form.**



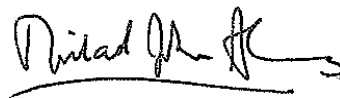
**SIGNATURE**

\_\_\_\_\_

**NAME Lucy Farrier**

**Position\_Honours student\_\_\_\_\_**

**Date\_\_\_\_\_17.3.2011\_\_\_\_\_**



**SIGNATURE\_\_\_\_\_**

**NAME\_\_Michael Adams\_\_\_\_\_**

**Position\_\_\_\_Senior lecturer\_\_\_\_\_**

**Date\_\_\_\_\_17.3.2011\_\_\_\_\_**

**Prior to submitting this application please ensure you have done the following:**

Completed every relevant question?

▪

Signed the declaration?

Attached outstanding research reports as required in existing permit?

Obtained any permits from other Authorities and attached copies?

---

**Forward proposal to:** *Stephen Wills*  
*CEO*  
*C/of Christo Haselden*  
*Ranger*  
*Lord Howe Island Board*  
*PO Box 5*  
*Lord Howe Island NSW 2898*  
[ranger@lhib.nsw.gov.au](mailto:ranger@lhib.nsw.gov.au)

**Office use only**

**The proposed research addresses priority areas outlined in the following plan/s:**

Lord Howe Island Biodiversity Management Plan 2007:

Section:

Other:

APPLICATION SUBMITTED TO:

Chris Haselden

Ranger

Recommended .....

Hank Bower

Manager Environment/World Heritage

Endorsed .....

Dave Kelly

Manager Environment & Community Development

Endorsed .....

Stephen Wills

CEO LHIB

Approved.....

---

File No:

Permit assessment complete                      yes/no

Permit sent    yes/no

Filed:    yes/no

## Appendix 9.3.3: Lord Howe Island Board Research Permit



### LORD HOWE ISLAND BOARD RESEARCH PERMIT

Commercial Activity (NSW only)

#### LORD HOWE ISLAND BOARD (LHIB) PERMIT

Lord Howe Island Board Research Policy 2011

Organised Research

Permit No: LHIB 03/11

This permission remains in force for the period from:  
unless sooner varied, suspended or cancelled.

01-JAN-2011 to: 01-JAN-2012

#### Permission is granted to:

Permittee: Lucy Farrier  
Institution: School of Earth and Environmental Science University of Wollongong  
Department:  
Address: 10A Toxteth Ave, Austinmer 2515

This permit and all conditions herein extend to all employees of the Permittee, and other persons acting on behalf of or at the direction of the Permittee for the purposes specified in this permit.

#### Use and entry authorised to the following:

Lord Howe Island World Heritage Area

#### Permitted location/s:

Lord Howe Island Main Island including the Permanent Park Preserve  
except where such authorised entry and/or use of a location is contrary to the any plan administered by the LHIB.

#### Use and entry authorised for the following activities:

Conduct of: Organised Research  
Permitted activities being: Conduct a survey and interview with Island Residents

#### LHIB Research Facility authorisation:

From:	N/A
Number of nights (accommodation only):	N/A
Number of days Laboratory use:	N/A
Number of people approved:	N/A

in accordance with the details above and subject to conditions stated on the following pages.

.....  
CEO  
Lord Howe Island Board

30 March 2011  
Date: .....

LHIB RESEARCH PERMIT 2011:

---

#### WARNINGS

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- 1) All activities, the subject of this permit, must be undertaken in accordance with the provisions of the laws in force from time to time in the State of New South Wales and, in particular, you abide by the provisions of the *Lord Howe Island Act 1953*, *The Lord Howe Island Regulation 2004*, *the Lord Howe Island Regional Environment Plan 2005 (REP)*, *The Permanent Park Preserve Plan of Management 2009*, *the Lord Howe Island Marine Parks Act 1997* and the *Marine Parks Regulation 1999*.
- 2) A breach by the Permittee/s or any person to whom this permit extends, of the *Lord Howe Island Act 1953* or *Lord Howe Island Regulation 2004* including any permit condition contained herein may result in the variation, suspension or cancellation of this permit.

---

#### STANDARD CONDITIONS

---

- 3) The Permittee must ensure that when operations are conducted on Lord Howe Island (LHI) under this permit, the permit or a certified copy of the permit is held at the site or sites of operation during transit to and from that site or sites.
- 4) The Permittee must produce a copy of this permit on site when requested by a Lord Howe Island Board (LHIB) Ranger.
- 5) The Permittee must inform staff and participants in the program of any restrictions applying under this permit.
- 6) The Permittee must ensure that no plant, animal or soil material is imported to or exported from the Island without prior approval from the Board outlined under the *Lord Howe Island Regulation 2004*.
- 7) The Permittee must notify the LHIB within seven (7) days of :
  - a) any change to the Permittee details; and/or
  - b) the cessation of operations to which this permit relates.
- 8) The Permittee must ensure that any waste is managed, transported, reused, stored, collected receipted and disposed of in an environmentally satisfactory manner pursuant to NSW Protection of the Environment Operations Act 1997, and that all reasonable measures regarding the control and prevention of pollution and waste from being introduced to LHI are implemented.

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#### SPECIFIC CONDITIONS

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##### Research

- 9) The Permittee/s must discuss and confirm sample sites with LHIB Ranger and/or Manager prior to commencing sampling. This is so research activities do not occur in areas where they are inconsistent with management objectives or interfere with other research.
- 10) The Permittee/s must notify the LHIB Ranger on 02 6563 2066 at least 72 hours prior to commencing research activities on LHI.
- 11) The Permittee/s are to provide GPS co-ordinates, specifying the datum and co-ordinate system used, for all sites sampled, data to be supplied in MGA.
- 12) The Permittee/s may collect (N/A) using (N/A)
- 13) The Permittee must not undertake any manipulative activities under this permit.
- 14) If the research activity requires camping a Camping Permit must be obtained from the LHIB upon arrival to the Island. No camping equipment is to be imported to the Island unless all items are brand new or cleaned with Phytoclean or mentholated spirits (10%) and all dirt is removed. Camping equipment must be declared for inspection by the LHIB Ranger upon arrival.
- 15) The Permittee must not remove or relocate any living or non-living product other than the permitted species sampling.

LHIB RESEARCH PERMIT 2011:

- 16) The Permittee/s must ensure that the sample sites are in a safe and tidy condition and do not present a hazard to other users. The placement of marker tape or survey equipment must be placed in an area of low visibility away from public view and the Island's walking track network.
- 17) The Permittee/s must not leave any equipment or material on the Island and must remove all equipment and material at the conclusion of the research activity or on expiry of the permit whichever is sooner.
- 18) The Permittee/s must obtain all relevant licenses prior to the commencement of the project.
- 19) Collection methods and activities to be restricted to those outlined in the project proposal.
- 20) Where relevant, all equipment and clothing (e.g. footwear) must be cleaned with Phytoclean or mentholated spirits (10%) and be free of soil, plant matter and soil pathogens such as Phytophthora and Myrtle Rust before arriving on the Island.
- 21) The Permittee/s must ensure that no detrimental environmental impact will result from the research activities.
- 22) The Permittee/s must ensure that adequate safeguard measures are adopted to minimise the exposure of the general public to any unnecessary risks.

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#### REPORTING CONDITIONS

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##### Research

- 23) The Permittee/s must, prior to the expiry of this permit, submit a short written report detailing samples collected, location of collection, significant or unusual observations and preliminary findings to the LHIB within two months of collection.
- 24) The Permittee must provide a plain English version of their project (1/2-1 page summary) to the LHIB for publication in the LHI newspaper and provide a slide/power point presentation to the elected LHI Board members and the community at the LHI public hall prior to leaving the Island.
- 25) The Permittee/s must supply two copies of all final reports and scientific papers arising from the project to the LHIB on completion of the project.
- 26) The Permittee must provide a copy (electronic and hard copy) of any published reports and results obtained as a result of the research conducted on LHI to the CEO, LHIB, PO Box 5, Lord Howe Island NSW 2898 or to email: [ranger@lhib.nsw.gov.au](mailto:ranger@lhib.nsw.gov.au)

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#### RESEARCH FACILITY CONDITIONS

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- 27) Use of the Lord Howe Island Board Research Facility for N/A persons for N/A in N/A is approved.
  - 28) The Research Facility provides a basic level of accommodation, including a laboratory workspace. All facilities are shared. The cost for use of the Research Facility accommodation is \$36.50 per person per night for which you will be invoiced at the conclusion of the visit. If you require the use of the laboratory, the cost is an additional \$49.80 per day for the project.
  - 29) Accommodation shall be restricted to those actually undertaking work or research. Spouses, children, friends etc. not directly involved in the approved work or research will not be permitted use of the facility.
  - 30) Length of stay will be restricted to the minimum time required to undertake the proposed work or research.
  - 31) The facility will not be available for additional time either preceding or following the minimum period required to undertake the work or research.
  - 32) The facility will not be available for permanent, long-term or holiday accommodation.
  - 33) Long-term storage of equipment or material is not permitted, and all equipment and materials are to be returned to the mainland at the conclusion of the visit.
  - 34) Users of the facility will be required to maintain the facility in a clean and tidy condition and report any damage or maintenance requirements to the LHIB Ranger.
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*LHIB RESEARCH PERMIT 2011:*

- 35) Approved use of the LHIB Research Facility requires the Permittee/s to make tentative or confirmed bookings with the LHIB Ranger. The Permittee/s must confirm the facility booking and pay in full the accommodation costs 1 month prior to the commencement date of the tentative booking. Payment is non-refundable. Bookings not confirmed will be deleted and made available to other research activities. The LHIB advise organising travel insurance prior to arrival on LHI.

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#### INSURANCE CONDITIONS

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- 36) The Permittee must at all times during the period of the permit, maintain a policy of public liability insurance for a sum of not less than ten million dollars (\$10,000,000) to indemnify itself, from and against liability for all action, suits, demands, costs, losses, damages and expenses (hereinafter called claims) which the Permittee may pay, sustain or be put to by reason of damage to property or injury to persons (including death) caused by or arising in any way out of the conduct of the Permittee on any lands or waters managed by the Authority or generally as a result of the presence of the Permittee, or the Permittee's agents or clients on lands or waters managed by the Authority.
- 37) The Permittee must not cancel or later the insurance policy without first obtaining written consent from the Authority.
- 38) In the event the insurer cancels the insurance policy prior to the expiration of the insurance policy, the Permittee must advise the LHIB in writing within three (3) business days of receiving advice of the cancellation from the insurer.
- 39) In the event the insurance policy expires prior to the expiration date of this permit, the Permittee must produce to the LHIB evidence of renewal of the insurance policy no fewer than 28 days prior to the expiry of the insurance policy.
- 40) The Permittee must provide a copy of the insurance policy and a copy of the certificate of currency of the insurance policy, to the delegate when required by the LHIB.
- 41) The Permittee must notify the LHIB as soon as possible of any fatal accident or serious injury sustained by a participant/s resulting from the conduct of the permitted activity listed in this permit on lands or waters of a marine park on LHI. All other accidents or injuries must be reported to the LHIB in writing within seven (7) days of the occurrence.

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#### INTERPRETATION AND DEFINITIONS

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A word or phrase in this permit has the same meaning as the word or phrase has in the Lord *Howe Island Act 1953* or *Lord Howe Island Regulation 2004*.

A reference to a date includes that date.



## Appendix 9.4: Recruitment Table

Respondent Categories					Recruitment Approach		
Environmental Managers	Islanders	Non-Islanders	Age	Gender	Survey	Targeted	Recruited through Facilitation and Snowballing
	Russell		60's	Male	√		
		Rick	30-40	Male			√
	Peter		30's	Male			√
	Dane		30's	Male			√
	Rhiana		30's	Female			√
	Sammuel		20's	Male			√
Gary			30-40	Male		√	
Ray			30-40	Male		√	
Pamela			30-40	Female		√	
	Emily		50-60	Female			√

	Jack		60-70	Male			√
	Sally		60-70	Female			√
	Bob		60-70	Male	√		
	Fred		60-70	Male			√
	Marie		70s	Female			√
	Winston		80	Male			√
Alex			30s	Female	√		
	Greg		70-80	Male	√		
		Ted	40-50	Male			√
		Kate	50 - 60	Female			√
	Bronwyn		80's	Female	√		
	Vivianne		60's	Female	√		
	Lesley		60's	Female	√		
Glen			30's	Male		√	

	Barry		60-70	Male			√
	Pat		80's	Female			√
	James		60-70	Male			√
	Sam Curtin		20's	Male	√		
	Sarah		30's	Female			√
	Myra		90's	Female			√
	Jan		40-50	Female			√
	Ken		60-70	Male			√
	Arthur		40-50	Male			√
	Elizabeth		50-60	Female			√
Jeff			30-40	Male		√	
	Kara		30's	Female	√		
		Carl	30's	Male			√
	Gerri		50-60	Female			√

	Ryan		20's	Male			√
	Ruth		50-60	Female			√
Tony			20's	Male		√	
	Robert		50-60	Male			√
	Leah		30's	Femlae			√
	Todd		30's	Male			√
	Julianne		70-80	Female	√		
	Matthew		40-50	Male			√
		Jenny	20's	Female			√
		Rebecca	20's	Female			√
	Natascha		30's	Female			√
		Josh	20's	Male			√

## **Appendix 9.5.1: Survey (page one)**

Dear Lord Howe Island resident,

This survey is part of an honours research project conducted by Lucy Farrier from the University of Wollongong, NSW. The aim of this project is to investigate the implications of World Heritage designation on the everyday lives of Lord Howe Island residents.

### **Why should you participate?**

Residents of Lord Howe Island have faced a number of challenges since the World Heritage designation of the Lord Howe Island Group in 1982. These include, development restrictions, tourism impacts, fishing restrictions and the provisions of the Permanent Park Preserve.

Unlike a lot of research on Lord Howe Island, this research is not about flora and fauna. Instead, this is an opportunity for residents to speak about island places that are meaningful to them. As well as being part of a World Heritage Area, Lord Howe Island is home to a small community of people. This survey attempts to identify the different places on Lord Howe Island that are important to residents, explore why these places are important to different residents and investigate what, if anything, threatens these important island places.

This research will benefit the Lord Howe Island community by documenting and examining the Island's cultural heritage values. In addition, this research may assist in the development of future management plans that respond to both resident's concerns and the conservation of the Island's outstanding natural values.

### **How can you help?**

Are you a permanent, or temporary, resident of Lord Howe Island? If yes, then Lucy Farrier would greatly appreciate your help by answering the accompanying questions.

### ***Future Research Plans***

Lucy is interested in learning more about the places on Lord Howe Island that are meaningful to you, and the way in which the World Heritage framework influences your day to day life. If you would like to talk more about these issues, Lucy will be

conducting interviews on the Island in early May. If you would like to participate in interviews please provide your contact details.

**Name:** ..... **Telephone:** .....

**Address:** ..... **Email:** .....

**Who can you contact about this project?**

If you have any queries or concerns in regards to this research project please contact Lucy Farrier at [lf764@uowmail.edu.au](mailto:lf764@uowmail.edu.au) or you can contact Lucy's supervisors: Ass Prof Gordon Waitt ([gwaitt@uow.edu.au](mailto:gwaitt@uow.edu.au); ph 4221 3684); Dr Michael Adams ([madams@uow.edu.au](mailto:madams@uow.edu.au); ph 02 4221 4284)

If you have concerns about the way the research is being conducted, please contact the Ethics Officer, Human Research Ethics Committee, UOW. Phone: 02 4221 4457.

## Appendix 9.5.2: Survey (page two)

### Question 2: Why are these places meaningful to you?

Please explain why these places are meaningful to you in the space provided below

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### Question 3: For you, what threatens these places?

Please explain what threatens these places in the space provided below

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## Appendix 9.5.3: Survey (map)

